

Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

087
C6

United States
Department of
Agriculture

Economic
Research
Service

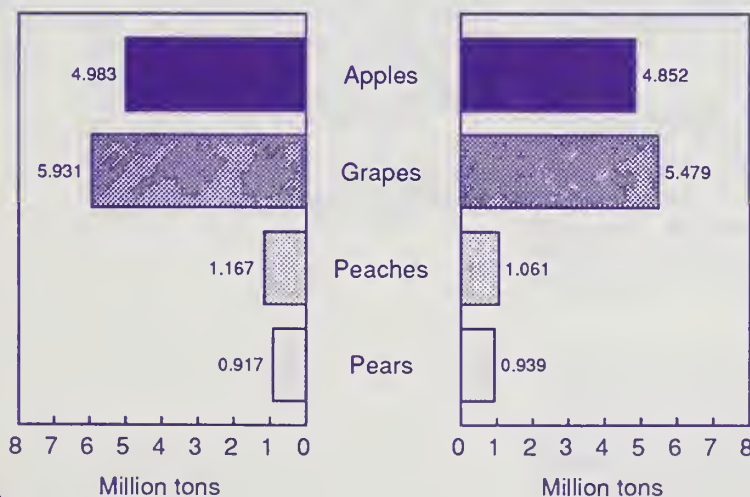
TFS — 255
September 1990

Fruit and Tree Nuts

Situation and Outlook Report

USDA
Library
1991 OCT -9 P 7:28
ACQ/CENTALS CRATIC

U.S. Production of Selected Noncitrus Fruit



Contents

Fruit and Tree Nuts Situation and Outlook. Commodity Economics Division, Economic Research Service, U.S. Department of Agriculture, September 1990, TFS-255.

Approved by the World Agricultural Outlook Board. Summary released Thursday, September 13, 1990. The summary of the next *Fruit and Tree Nuts Situation and Outlook* is scheduled for release on November 15, 1990. Summaries and full Situation and Outlook reports may be accessed electronically. For details, call (202) 447-5505.

The *Fruit and Tree Nuts Situation and Outlook* is published three times a year and supplemented by a yearbook. Subscriptions are available from ERS-NASS, P.O. Box 1608, Rockville, MD 20849-1608.

Or call, toll free, 1-800-999-6779 (weekdays, 8:30-5:00 ET). Rates: 1 year \$12, 2 years \$23, 3 years \$33. Foreign customers add 25 percent for subscriptions mailed outside the United States. Make checks payable to ERS-NASS. Single copies are available for \$8 each.

Time to renew? Your subscription to the *Fruit and Tree Nuts Situation and Outlook* expires in the month and year shown on the top line of your address label. If your subscription is about to expire, renew today. Call 1-800-999-6779.

Fruit Price Outlook	5
Grower and Retail Prices Strengthen	5
Noncitrus Fruit	6
Smaller U.S. Apple Crop in 1990	6
Mid-summer Banana Prices Rise With Strike In Honduras	8
Smaller Grape Crop Forecast for 1990	9
1990 Pear Production Forecast Near-Record	11
Stonefruit Production Short in 1990	12
Citrus Fruit	14
1989/90 Orange Crop Smallest in 5 Years	14
Grapefruit Production Set Back in 1989/90	15
Berries	17
Berry Supplies Ample	17
Tree Nuts	19
Record Tree Nut Supplies Again in 1990/91	19
List of Tables	22

Situation Coordinator
Katharine C. Buckley (202) 786-1884

Principal Contributors
Katharine C. Buckley (202) 786-1884
Boyd M. Buxton (202) 786-1886
Doyle C. Johnson (202) 786-1884

Data Information Coordinator
Wynnice P. Napper (202) 786-1882

Summary

Fruit Prices Show Strength This Year

The index of grower prices for fresh and processing fruit jumped appreciably in April reflecting the higher prices paid to growers for this season's smaller peach crop. After dipping in June, the index recovered and advanced in July to reach its highest level this year, boosted by stronger grower prices for apples and peaches. However, lower citrus and pear prices put downward pressure on the August index, weakening it to levels set a year earlier. The index will advance this fall because prospects for a smaller U.S. apple crop and California navel orange crop should provide enough upward pressure on the index to offset lower grower prices for pears.

In July, the Consumer Price Indexes (CPI) for fresh and processed fruit reached record levels. This mirrored the relatively higher retail prices consumers are paying as a result of tighter orange juice supplies and shorter crops of several important citrus and noncitrus fruits this summer. The CPI for fresh fruit is expected to advance further this fall if prospects for smaller apple and orange supplies are realized. Conversely, the CPI for processed fruit is expected to weaken with good supplies of most frozen and dried fruits in storage and with prospects for a larger domestic pack of frozen concentrated orange juice next season.

Many Noncitrus Crops Short

The 1990 apple crop is forecast at 9.7 billion pounds, 3 percent smaller than last year, and 9 percent below 1987's 10.7-billion-pound record crop. Most of the decline is attributable to smaller crop expectations in the Central and Western regions, which are expected to offset increased production in the Eastern region. The smaller crop should lead to higher grower prices this season if imports do not rise appreciably.

The September 1 forecast for the U.S. grape crop pegged production at 5.5 million short tons, 7 percent below 1989, and almost 9 percent below 1988. Production in California, the largest producing State, is forecast down 8 percent. Prospects are for smaller crops of table, wine, and raisin type grapes. Despite the decrease in production, grower prices are expected to remain similar to last season because of larger table grape imports, larger raisin stocks, and sluggish raisin and wine consumption.

With harvest of the 1990 U.S. pear crop underway, production is forecast at 938,500 short tons, up 2 percent from last year and less than 1 percent below 1987's record harvest. Grower prices for canning pears are expected to remain firm in 1990/91 with good demand from processors. However, this season's large crop will put downward pressure on grower prices for fresh pears.

Although larger crops of nectarines and apricots are forecast this season,

adverse weather conditions early in the spring reduced crop prospects for peaches, sweet and tart cherries, and California prunes and plums. Consequently, total U.S. stonefruit production is forecast down 9 percent from last year, at 2.04 million short tons.

1989/90 Orange and Grapefruit Crops Significantly Lower

USDA's end-of-season estimate for the 1989/90 U.S. orange crop placed production at 7.81 million short tons, down 13 percent from last season due to late-December freezing temperatures in Florida and Texas. This was the smallest crop in 5 years. Similarly, because of the damage sustained by the Florida and Texas grapefruit crops in December, the final forecast for the 1989/90 U.S. grapefruit crop placed production down 31 percent from last season. Although California/Arizona orange and grapefruit crops were up in 1989/90, growers in the two States received significantly higher grower prices as a result of the freeze.

Record Tree Nut Supplies Expected In 1990/91

Larger 1990/91 tree nut crops, except walnuts and pecans, and larger carryin stocks will result in burdensome supplies. The increase in total supplies is expected to result in lower grower prices, since the growth in supplies has outpaced the growth in total disappearance in recent years.

Table 1--Economic indicators of the U.S. fruit and tree nut sectors

Item	1982/86 Average	Annual				1989 II Quarter 1/	1990 II Quarter 1/
		1987	1988	1989	1989		
Gross National Product (1982 \$ billion)	3,454.32	3,845.3	4,016.9	4,117.7	4,112.2	4,162.8	
GNP implicit price deflator (% change)	2.62	3.2	3.3	4.1	3.9	4.4	
Disposable personal income:							
Total (1982 \$ billion)	2,448.264	2,670.7	2,800.5	2,869.0	2,854.9	2,900.9	
Per capita (dollars)	10,320.8	10,946	11,368	11,531	11,492	11,571	
Personal consumption expenditures:							
Food and beverage (1982 \$ billion)	423.9792	454	462.2	462.9	461.9	459	
Civilian population (million)	234.834	241.7	244.1	246.6	246.2	248.5	
-- 1977=100 --							
Index of prices received by farmers:					August 1989	August 1990	
All farm products	132.2	126	138	147	145	150	
Fruit, all	170.8	181	181	184	184	182	
Fruit, fresh market	181.2	194	194	194	193	190	
-- 1982=100 --							
Index of prices paid by farmers:					July 1989	July 1990	
All production items	156.8	151	170	177	168	170	
Fertilizer	136.6	118	130	137	141	130	
Ag chemicals	125.4	124	126	132	133	141	
Fuels and energy	195.2	161	163	180	187	185	
Interest payable per acre	235.8	190	186	177	177	178	
Taxes payable per acre	132	139	142	152	152	156	
Wage rates (seasonally adjusted)	151.4	167	172	185	189	193	
-- 1982=100 --							
Producer price indexes: 2/							
Fresh fruit	106.8	112.0	113.5	111.9	117.3	132.1	
Dried fruit	95.0	95.0	99.1	103.0	102.8	104.9	
Canned fruit	107.2	115.3	120.2	122.6	123.1	127.3	
Frozen fruit and juice	107.0	113.3	129.8	124.6	128.9	146.3	
-- 1982-84=100 --							
Consumer price index:							
All food	103.4	113.6	118.3	124.0	124.4	130.4	
Fresh fruit	102.9	113.5	118.2	125.1	125.5	132.7	
Processed fruit	107.0	132.0	143.0	152.4	150.6	176.6	
Processed fruit	103.2	110.6	122.0	125.9	126.0	140.1	
-- 1982-84=100 --							
Farm-retail price spread: 3/					July 1989	July 1990	
Market basket	104.3	119.4	125.2	134.1	134.5	144.4	
Fresh fruits	110.0	145.7	158.7	171.1	173.5	204.6	
Fresh vegetables	105.2	126.5	141.3	153.3	151.8	158.5	
Processed fruit and vegetables	102.1	108.3	111.7	122.3	123.0	129.4	
-- 1985=base year --							
Exports, U.S.:					May 1989	May 1990	
Fruits, nuts, and prep. (mt)	5,112	4,364	5,732	5,008	600	540	
Fruit juices incl. frozen (1,000 hl)	2,054	2,146	2,437	2,601	244	271	
Imports, U.S.:							
Fruits, nuts, and prep. (mt)	1,286	1,734	1,806	2,019	201	175	
Bananas (mt)	2,792	3,106	3,020	3,097	289	314	
Fruit juices incl. frozen (1,000 hl)	26,762	34,059	26,659	27,416	2,927	3,144	
-- 1985=base year --							
Real exchange rates, selected countries: 4/					July 1989	July 1990	
Canada (dollar)	1.3066	1.2893	1.1959	1.1501	1.1471	1.1457	
Japan (yen)	222.0749	151.8217	138.8924	155.0397	156.4157	176.6897	
United Kingdom (pound)	0.6999	0.6000	0.5460	0.5806	0.5832	0.5373	
New Zealand (dollar)	1.7969	1.3672	1.2018	1.3193	1.3565	1.3204	
Hong Kong (dollar)	7.5140	7.5830	7.3418	7.0588	7.1585	6.8983	
Brazil (cruzado)	5.4015	5.1318	4.0770	4.8777	3.9685	3.1136	
Chile (peso)	131.1292	162.0487	163.9135	162.2917	163.5530	150.6833	
Taiwan (new dollar)	37.7794	33.2282	28.6675	28.4252	28.1096	29.9537	

1/ Quarterly data are seasonally adjusted at annual rates. 2/ Commodities ready for sale to ultimate consumer.

3/ Retail costs are based on indexes of retail prices for domestically produced farm foods published by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for by-products. 4/ An increase in the real exchange rate represents an appreciation in the value of the dollar.

Grower and Retail Prices Strengthen

The grower price index rose through the summer, boosted by shorter supplies of many noncitrus fruits and strong fresh orange prices. The Consumer Price Indexes for fresh and processed fruit reached a new record in July.

Grower Prices Strengthen

The index of grower prices for fresh and processing fruit remained at levels below a year ago through February, reflecting the lower prices paid to Florida growers for the large volume of freeze-damaged oranges and grapefruit sold to processors after the late-December freeze. In addition, lower prices received by apple growers because of last season's large crop also kept some downward pressure on the index until supplies of storage apples began to wane in late spring. The index made an appreciable jump in April, mirroring the higher prices paid to growers for a shorter peach crop on the East Coast and strong demand for California production. After dipping in June as harvest of most noncitrus fruits commenced, the index advanced to 205 (1977=100) in July, up 13 percent from a year ago and the highest level this year, boosted by strengthening grower prices for apples and peaches.

While lower citrus and pear prices put downward pressure on the August index, the index will advance this fall if prospects for a smaller U.S. apple crop and California navel orange crop provide enough upward pressure on the index to offset lower grower prices for pears.

Consumer Price Index for Fresh Fruit at Record Level

Retail prices for fresh fruit as measured by the Bureau of Labor Statistics' (BLS) Consumer Price Index (CPI) remained strong through July, boosted by shorter supplies of several important noncitrus fruits and strong demand for California citrus. In July, the index reached a record 176.6 (1982-84=100), up 2 percent from June and 17 percent higher than a year ago. The advance between June and July was caused by a strengthening in retail prices for apples, bananas, grapefruit, lemons, and

Figure 1
Prices Received by Producers

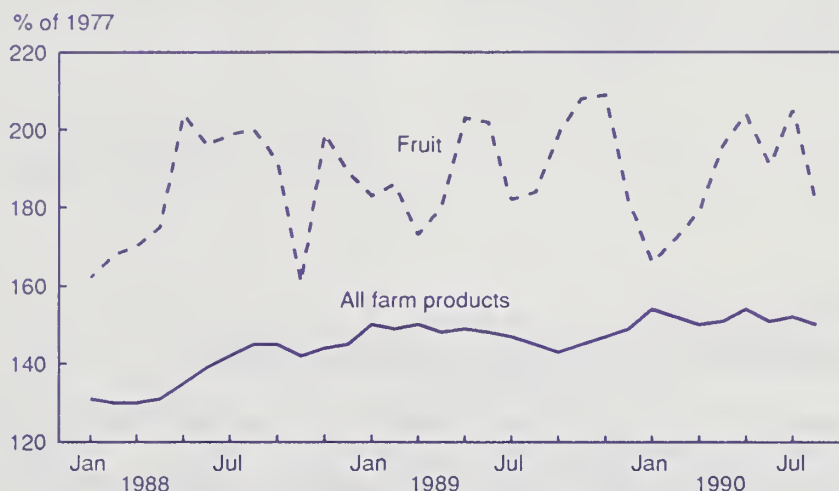
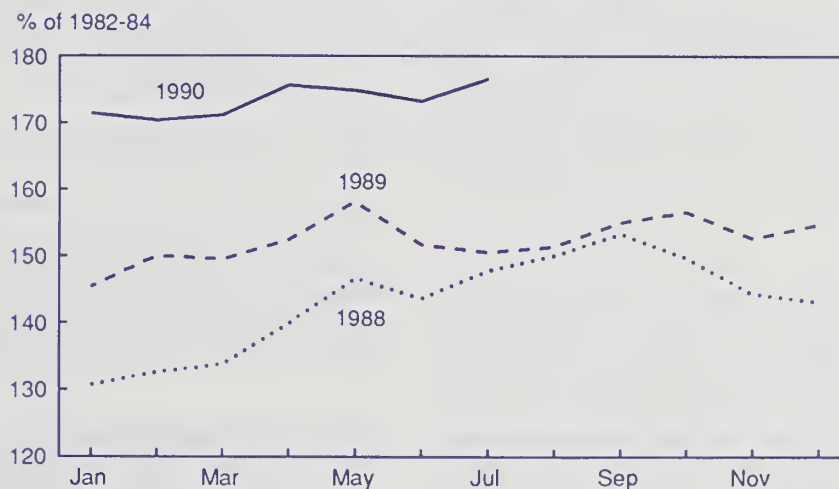


Figure 2
Fresh Fruit: BLS Consumer Price Index



peaches, which offset moderately lower retail prices for fresh grapes and strawberries. The fresh fruit CPI will advance further this fall if prospects for smaller fresh apple and orange supplies are realized.

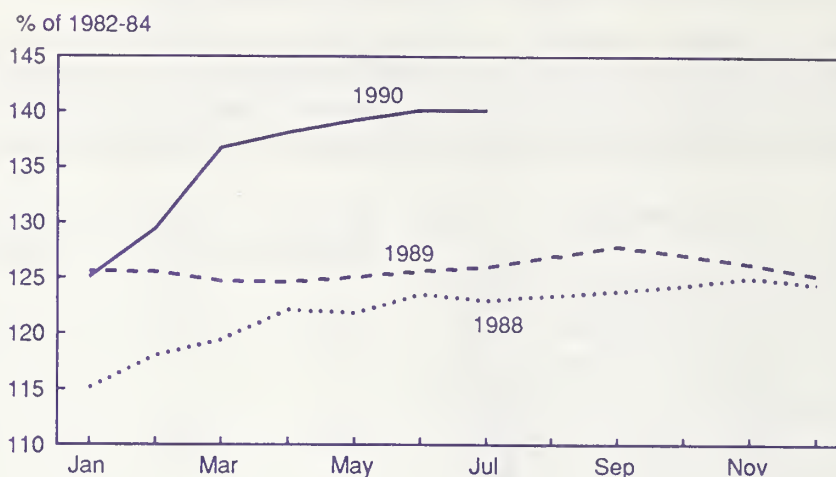
Processed Fruit CPI Expected to Soften

The CPI for processed fruit took an appreciable jump in March, induced by tight supplies of frozen concentrated orange juice (FCOJ) as a result of Florida's freeze and record-high wholesale and retail FCOJ prices. As retail

prices for FCOJ remained firm through the summer, and retail prices for canned and dried fruit slightly advanced, the CPI for processed fruit peaked at a record 140.1 (1982-84=100) in June, 12 percent above a year earlier. The index remained unchanged in July, as retail prices for canned and dried fruits showed enough seasonal strength to offset a barely significant decline in retail prices for frozen fruits. The index is expected to weaken this fall with good supplies of most frozen and dried fruits in storage facilities, and prospects for a larger domestic FCOJ pack.

Figure 3

Processed Fruit: BLS Consumer Price Index



Noncitrus Fruit

Smaller U.S. Apple Crop in 1990

A smaller harvest and lower pre-season cold storage holdings portends a good season for U.S. apple growers.

Smaller Crop Expected in the Western and Central Regions

USDA's August 1 forecast placed total 1990 U.S. apple production at 9.7 billion pounds, 3 percent smaller than last year and 9 percent below 1987's 10.7-billion-pound record crop. Most of the production decline in 1990 is attributable to smaller crop expectations in the Central and Western regions that resulted from unfavorable weather, which caused poor pollination and disease problems in several large apple producing States. In Washington, where growers are expected to harvest 4.9 billion pounds of apples this year, July heat slowed fruit growth and increased the incidence of sunburn. The Michigan apple crop also is expected to be down 16 percent from last season's 950 million pounds due to poor pollination and a heavy June fruit drop.

Conversely, apple production in the Eastern region is expected to increase 5 percent from last year's 2.37 billion pounds. Larger crops are expected in all Eastern States except Virginia, Maryland, and South Carolina, where pro-

duction was affected by freezing weather late in the spring. In Pennsylvania, production is forecast at 470 million pounds, up 47 percent from last year's weather-damaged crop. The New York harvest is forecast up 3 percent at 990 million pounds.

Stronger Price Prospects in 1990

A smaller 1990 apple crop combined with lower cold storage holdings heading into the harvest should improve prospects for higher grower prices for fresh market apples this season, if the brisk movement of the past several

months continues. With July 31 cold storage stocks down 32 percent from a year ago, at 118.9 million pounds, grower prices for fresh apples averaged 18.4 cents per pound during the month, compared with 12.6 cents in June and 11.5 cents a year earlier. Grower prices strengthened further in August to an average 20.4 cents per pound, compared with 15.9 cents a year ago. Overall, grower prices for fresh apples in 1990/91 are expected to average higher than 1989/90's 13.4 cents per pound.

With lighter processor inventories of several processed apple products head-

Table 2--Apples: Regional production, 1988, 1989, and indicated 1990

Area	1988	1989	1990
--Billion pounds--			
East	2.96	2.37	2.49
Central	1.24	1.44	1.21
West	4.94	6.15	6.00
Total 1/	9.13	9.97	9.70

1/ Some figures may not add to total due to rounding.

Source: National Agricultural Statistics Service, USDA.

ing into the new season, and expectations for a smaller harvest, grower prices for processing apples also are expected to show some improvement in 1990/91, after diving 12 percent last season from 1988/89's \$123 per ton. From data collected in its annual survey of cooperating apple processors, the International Apple Institute (IAI) projected 1990/91 apple utilization for processing at 4.0 billion pounds, virtually unchanged from last season. The estimate represents 41.4 percent of the total crop, compared with 40.6 percent last season.

Based on the inventory positions reported by the IAI survey of apple processors, and expected raw product availability

in all regions, the IAI reports that, in general, inventories of juice, canned apple slices, and miscellaneous apple products (baby food, apple butter, vinegar, etc.) are more favorable heading into 1990/91 than a year ago, and are less favorable for apple sauce, frozen slices, and dried apples. Consequently, the IAI estimates that overall raw product requirements for juicing and for processing into canned slices will be heavier this season, while fewer apples will be needed for freezing, drying, and canned apple sauce. Heavier raw product requirements from Eastern processors will be facilitated by the larger crop expectations in most Eastern States. However, Western and Central State processors trying to fill greater tonnage requirements will be squeezed if smaller crop prospects in both regions are realized.

Apple Exports Rebound; Imports Lower

Signifying a resurgence in consumer demand for U.S. fresh apples in foreign markets in the wake of 1988/89's alar scare, U.S. fresh apple exports rebounded in 1989/90 to reach 333,322 metric tons, up 34 percent from the previous season. Exports to Taiwan, the largest overseas market for U.S. fresh apples, totaled 67,484 metric tons, up 47 percent from 1988/89. U.S. exports to Hong Kong also posted significant gains, rising 49 percent from last season. Although shipments to the United Kingdom and Sweden were sluggish early in the season, movement picked

Figure 4
U.S. Fresh Apple Prices

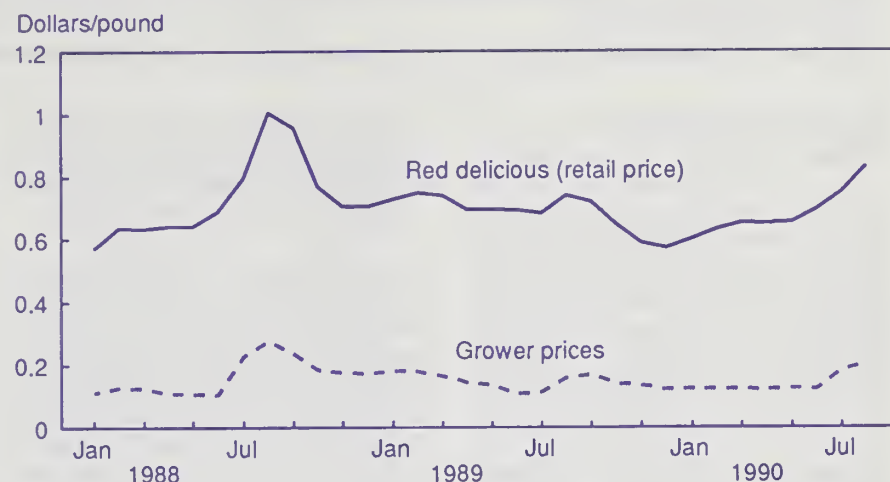


Table 3--Apples for processing: Utilization by product, 1985-1990 1/

Products	1985	1986	1987	1988	1989	1990
--1,000 bushels-- 2/						
Canning:						
Sauce	21,520	20,771	23,610	24,982	23,595	22,400
Slices	3,850	3,650	3,750	4,100	3,800	3,900
Other	4,520	3,650	3,730	4,230	4,000	4,000
Subtotal	29,890	28,071	31,090	33,312	31,395	30,300
Juicing	43,788	39,121	69,733	43,443	49,183	50,000
Drying	5,771	4,748	6,757	6,786	6,724	6,400
Freezing	4,626	6,126	5,931	6,326	7,655	7,500
Other 3/	1,760	2,164	1,755	1,588	1,350	1,500
Total	85,835	80,230	115,266	91,455	96,307	95,700

1/ 1989 estimate derived from annual survey reports provided by 30 processors representing a substantial portion of the total market.

2/ 42-pound bushels.

3/ Includes baby food, apple butter, vinegar, etc.

Source: Data compiled for the 1990 Apple Marketing Clinic, Chicago, IL., August 17-18, 1990, International Apple Institute, McLean, VA.

up late in the summer. U.S. fresh apple exports to the United Kingdom and Sweden together rose 6 percent from last season to reach 34,609 metric tons in 1989/90.

Larger domestic supplies and lower retail prices in U.S. markets helped to curtail U.S. fresh apple imports in 1989/90. Imports totaled 106,476 metric tons during 1989/90, 8-percent below the 1988/89 season. U.S. shipments were down from all major sources including Canada, New Zealand, and Chile.

Most U.S. fresh apple imports enter during the late winter through early summer months when domestic production

is being marketed from storage. Although data are not available, indications are that area planted in less-traditional apple varieties, such as Gala and Fuji is expanding in the major exporting countries. Consumer awareness and demand for less-traditional apple varieties are growing in U.S. markets where prices are often at a premium to the more-traditional varieties, such as Red Delicious. Consequently, U.S. imports of less-traditional apple varieties are expected to grow.

Mid-summer Banana Prices Rise With Strike In Honduras

Honduran banana strike disrupts shipments in July and August; U.S. market reacts with higher prices.

U.S. Imports Active In First Half of 1990

U.S. banana imports reached 1.56 million metric tons during the first 6 months of 1990, up 7 percent from a year ago. Imports from Ecuador, the largest U.S. supplier, were up 36 percent from a year earlier, at 590,587 metric tons, and offset sluggish imports from Costa Rica and Honduras.

A strike initiated by Honduran banana workers against Chiquita Brands, Inc., in late June, significantly disrupted Honduran banana shipments in July and August and resulted in unseasonably high retail prices in U.S. markets. Although official U.S. trade statistics are not yet available for July and August, data compiled by USDA's Market News Service indicated U.S. shipments of Honduran bananas between July 1 and August 18 totaled only 27,034 metric tons, down 54 percent from a year earlier. Based on estimates by the Union of Banana Exporting Countries, the strike curtailed Honduran exports of about 108,000 metric tons over its seven-week dura-

tion. The United States usually accounts for well over 60 percent of the country's total banana exports with Chiquita being the largest handler.

U.S. retail banana prices, which normally soften with stiffer competition from summer fruits, sharply rose in July in response to the reduction in supplies from the Honduras. Although the impact was primarily on the East Coast, where the bulk of Honduran banana imports are sold, West Coast retail prices also reflected the market short-

age. In July, U.S. retail banana prices reported by the Bureau of Labor Statistics averaged 52.9 cents per pound, up 18 percent from June.

Higher retail prices also caused a sharp rise in the CPI for bananas between June and July. The index reached a record 160.4 (1982-84=100) in July, up 21 percent from June and 20 percent from a year ago. The index is expected to soften over the next few months as Honduran shipments resume.

Figure 5

Bananas: BLS Consumer Price Index

% of 1982-84

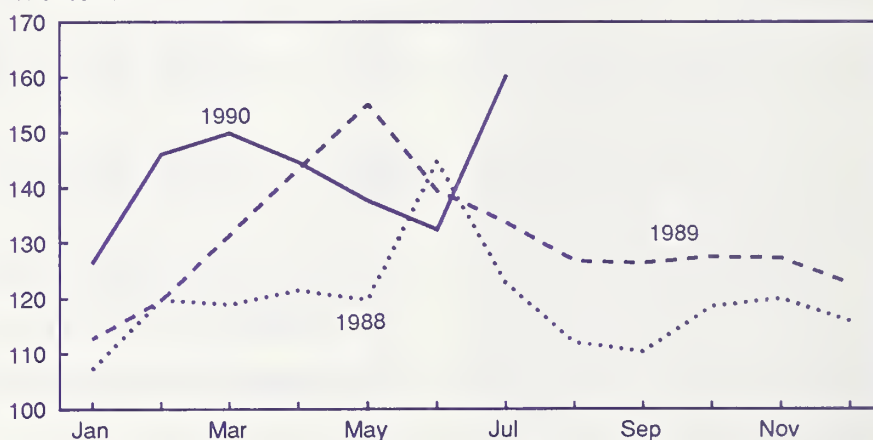


Table 4--Banana imports, United States, 1984-90

Country	1984	1985	1986	1987	1988	1989	1989 1/	1990 1/
-- Metric tons --								
Ecuador	499,626	720,428	744,118	719,975	757,341	849,642	434,631	590,587
Costa Rica	585,065	534,470	565,699	551,167	595,130	637,105	316,889	275,998
Honduras	537,047	568,560	516,453	586,272	607,685	551,704	283,286	289,194
Colombia	468,925	439,361	521,090	492,308	446,852	2/	2/	2/
Other	486,543	705,932	631,034	590,822	466,904	881,614	424,586	406,684
Total	2,577,206	2,968,751	2,978,394	2,940,544	2,873,912	2,920,065	1,459,392	1,562,463

1/ January-June.

2/ Included in other.

Source: Foreign Agricultural Service, USDA.

Smaller Grape Crop Forecast for 1990

The 1990 U.S. grape crop is expected to be lower for the second consecutive year, and grower prices should remain at last year's levels.

U.S. Grape Crop Forecast 7 Percent Smaller

The September 1 forecast for the total U.S. grape crop was 5.5 million short tons, 7 percent below 1989 and almost 9 percent below 1988's bumper crop. Production in California, the dominant grape producing State, with over 90 percent of the total U.S. crop in 1989, is forecast down 8 percent. Table, wine, and raisin type grapes are all forecast down in California, but raisin type grapes are expected to be down over 12 percent this year.

Crop conditions in California are similar to last year. Clusters are reported full and berry size large, but the cluster count is down. Excellent quality was reported for most varieties of table grapes.

Of the other major producing States, grape production is forecast up in only Michigan and Arizona, while smaller crops are expected in New York, Washington, and Pennsylvania. Good pollinating weather and excellent growing conditions in Michigan could cause grape production to jump there by 35 percent. However, Michigan still would account for only 1 percent of the total U.S. grape crop. Yields of concord grapes in Washington, about 80 percent of the State's crop, are expected to be lower due to an extended bloom period this spring.

Fresh Grape Imports Jump 33 Percent

Through May 1990, imports of fresh grapes from Chile and Mexico were ahead of last season. Imports from Chile, recovering from the adverse effect of 1989's cyanide scare, ran almost 37 percent above the previous season through May. Imports from Chile are expected to remain strong this season and continue the upward trend. The United States imported 34 percent of the fresh grapes consumed during the 1988/89 season, up from 9 percent in 1970/71. The rapid rise in imports has

provided consumers with fresh grapes, primarily during the domestic off season, but consumption of domestic grapes also has increased (see fig.).

U.S. fresh grape consumption has tended to level off in the late 1980's, suggesting that the market may be maturing (see fig. 6). Neither imports nor domestic grapes consumed in the United States have shown the dramatic increases that occurred in the early 1980's.

Although domestic shipments of table grapes between May and August were about even with the same period last season, during August they surpassed year-ago volume. Season-to-date shipments were only even because last year's table grape crop was earlier than normal, which allowed a larger proportion of the grape crop to be marketed early.

Raisin Consumption Declines From Last Year's 20-Year High

A decline in raisin shipments and higher exports outpaced increased imports and reduced total U.S. per capita raisin consumption from an estimated 2.09 pounds in 1988/89, to about 1.9 pounds in 1989/90 (see fig. 7). However, this

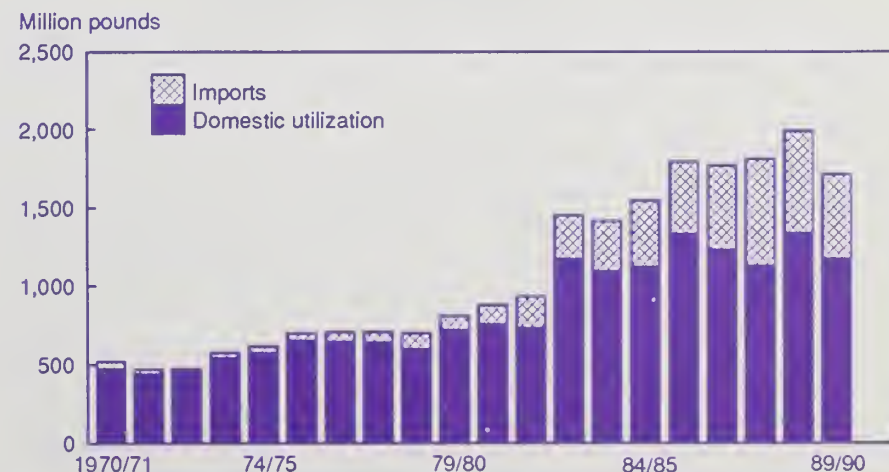
year's expected lower consumption is still in line with the general upward trend over the past two decades.

The 1990 raisin production was progressing well in early September with a higher-than-usual proportion of grapes down for drying during the first week of September. Sluggish domestic movement this past season is expected to build raisin stocks coming into the 1990/91 season. The projected decline in raisin type grape production will help offset higher carryin stocks and take some pressure off the need for a raisin acreage diversion or higher allocation of the current crop to reserves. Raisin production is expected to be at least 10 percent smaller than last year.

Wine Net Imports Continue Down

Shipments of foreign wine into the United States continued to decline in 1989, dropping over 6 percent to 76 million gallons. On the other hand, U.S. wine exports jumped over 30 percent to an estimated 22 million gallons. The decline of the U.S. dollar, relative to currencies of major U.S. trading partners during the past 5 years, has been a major factor in higher exports and lower imports. Foreign market development activities funded under the Targeted

Figure 6
U.S. Fresh Grape Consumption



Export Assistance (TEA) program have also been instrumental in stimulating foreign demand. U.S. per capita consumption of all wine declined from 2.24 gallons in 1988 to 2.11 in 1989, a drop of almost 6 percent. Early-season prices offered growers for wine variety grapes were about the same as a year ago.

Grower Price Expected To Be About The Same as Last Year

Grower prices for grapes in 1990/91 should remain at or above levels set a year earlier. Smaller crops of table, wine, and raisin type grapes, strong demand for table grapes, and improved exports of wine should offset the impact of higher fresh grape imports, heavier raisin stocks, and sluggish raisin and wine consumption.

Figure 7
U.S. Per Capita Raisin Consumption

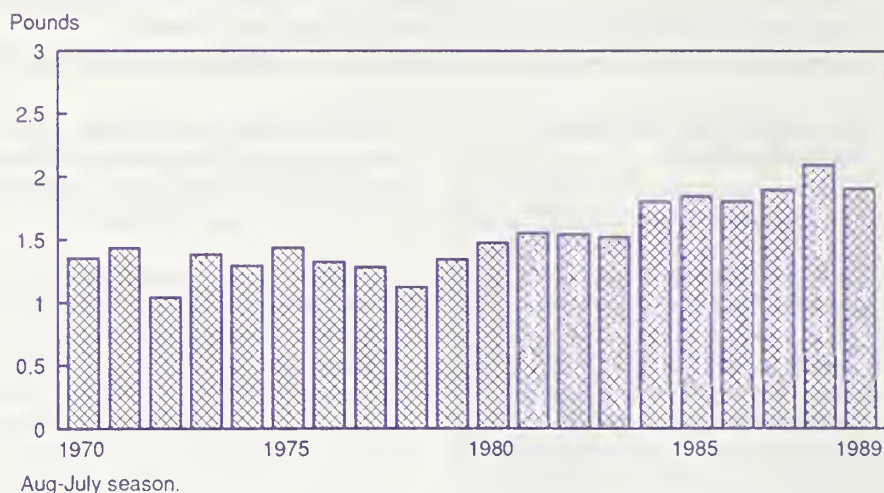
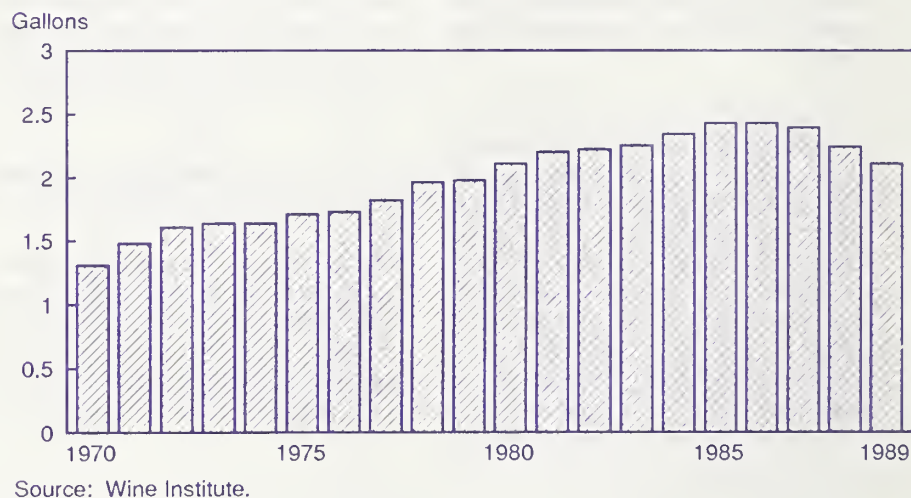


Figure 8
U.S. Per Capita All Wine Consumption



1990 Pear Production Forecast Near-Record

A near-record harvest and heavier import prospects will put downward pressure on grower prices for fresh pears in 1990/91, but strong processing demand is expected to support prices for canning pears.

Larger Crop Expected for Third Consecutive Year

With harvest of the 1990 U.S. pear crop underway, the September forecast placed total production at 938,500 short tons, up 2 percent from last year and less than 1 percent below 1987's record harvest. Crop conditions are reported good to excellent in all production regions except New York, where damage from spring frosts in the Hudson Valley is now apparent.

Harvest of bartlett pears is now underway in California, Washington, and Oregon, where the crop is forecast at 550,000 short tons, up 5 percent from last year. Bartlett pears are used primarily for processing. Although carryover stocks and pack data for canned pears are no longer available from the industry, indications are that the healthy demand for canning bartletts of the past several seasons will continue in 1990. In July, a trade source estimated that of the total volume of regular bartletts (other than red) expected this year, approximately 63 percent will be canned, 12 percent will be processed into byproducts, and 25 percent will be sold fresh. The trade also estimated that 85 percent of the expected red bartlett harvest, 8,485 tons, will be sold fresh. In 1989/90, 76 percent of total utilized bartlett production was processed.

In September, the 1990 harvest of pears other than bartlett in Washington, Oregon, and California was forecast at 358,000 short tons, up less than 1 percent from last year. Larger production in Washington is expected to offset a smaller Oregon crop, and production in California is expected to be virtually unchanged from last year. Over 85 percent of other pear varieties are usually sold in fresh markets; the remainder are pressed into juice or canned.

Prospects for Lower Prices

In the past few years, grower prices for fresh and processing pears have

remained strong despite consistently larger crops. Heavy advertising and promotion efforts by the trade have helped to stimulate demand in domestic and export markets. Even though the 1989/90 U.S. pear harvest was the second largest in over a decade, the season-average grower price for all pears reached a record \$275.00 per ton. However, although grower prices for canning pears are expected to remain firm in 1990/91, with good demand from processors, this season's large crop will put downward pressure on grower prices for fresh pears. Grower prices for fresh market pears averaged \$288.00 per ton in August, down 33 percent from July and 21 percent below a year ago.

Moreover, attractive U.S. fresh market prices in recent years have encouraged pear plantings in exporting countries such as Chile and Argentina. As more trees in these countries are reaching bearing age, U.S. pear growers are facing mounting competition in domestic and foreign markets. Rising at an average annual rate of 18.3 percent since 1980/81, imports are a small but increasing portion of fresh pear consumption in the United States. Imports accounted for 12 percent of U.S. fresh pear consumption in 1989/90 compared

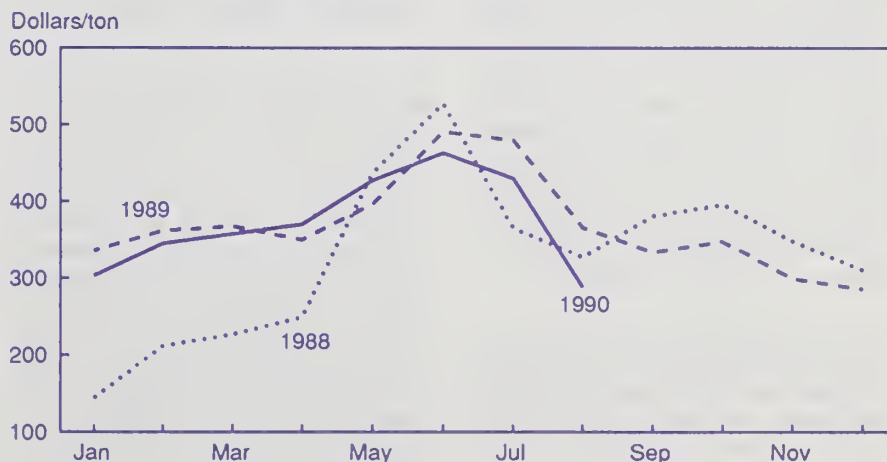
with 3 percent in 1980/81. Should U.S. fresh pear imports continue to increase at a faster rate than U.S. consumption and exports, grower prices would be expected to slide to lower levels, particularly during the spring and summer months when imports compete with domestic pears being marketed from storage.

Foreign Trade Active

Growing at an average annual rate of 5.5 percent since 1980/81, U.S. fresh pear exports totaled 85,227 metric tons in 1989/90, up 40 percent from 1988/89 and a new record. Shipments were heavier to all foreign destinations, but posted the largest gain to Mexico, where they were more than double the previous season at 27,125 metric tons. Mexico, which liberalized imports in late 1987, is a growing market for fresh deciduous and stone fruit, which is seasonally scarce in Mexican markets. Demand continues to expand as consumer purchasing power strengthens as a result of anti-inflation measures initiated by the Mexican government in 1987. Export promotion funds through the TEA program have also been instrumental in expanding foreign markets for U.S. fresh pears.

Figure 9

Fresh Pears: U.S. Equivalent On-Tree Return Received by Growers

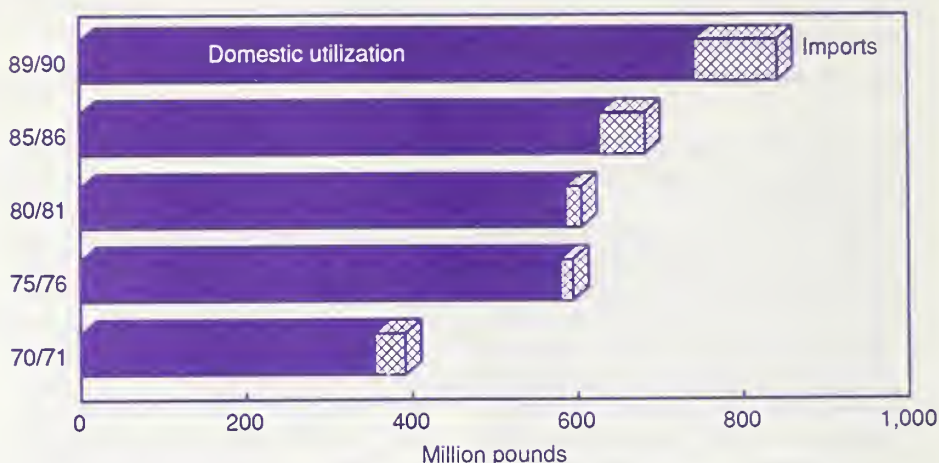


U.S. fresh pear imports totaled 42,235 metric tons in 1989/90, up 5 percent from the previous season and the heaviest ever. The increase was primarily due to stronger imports from Chile and Argentina, which together rose 6 percent from 1988/89's 34,885 metric tons. This more than offset a small decline in Asian pear imports from Japan.

Boosted by strong demand in Japan and Canada, and perhaps by better reporting of U.S. exports to Canada, U.S. canned pear exports more than doubled from last season to reach 2,120 metric tons in 1989/90. Japan continues to be the largest foreign market for U.S. canned pears. Japanese imports of U.S. canned pears more than doubled in 1989/90 from 1988/89, and at 489 metric tons, accounted for 23 percent of total U.S. exports.

Figure 10

U.S. Fresh Pear Consumption



Stonefruit Production Short in 1990

Although larger crops of nectarines and apricots are expected, adverse weather conditions early in the spring reduced crop prospects for peaches, sweet and tart cherries, and California prunes and plums. Total U.S. stonefruit production is forecast down 9 percent from last year, at 2.04 million short tons.

Smallest Peach Crop In Five Years

In August, the 1990 U.S. peach crop was forecast at 2.12 billion pounds, down 9 percent from last season and the smallest crop since 1985. The short crop this year is the result of freezing temperatures in March that significantly reduced prospects along the East Coast. In South Carolina, the second largest peach producing State, the crop is estimated down 67 percent from last year, at 90 million pounds. New Jersey production prospects were also lowered 36 percent from last year's 70 million pounds. Conversely, adverse weather conditions this spring had little effect on the California freestone and clingstone crops. In August both were forecast up 1 percent from 1989, at 530 million and 1.0 billion pounds, respectively.

As a result of shorter supplies, grower and wholesale prices for fresh peaches remained well above a year ago through the summer. In August, grower prices for fresh peaches averaged 29.5 cents

per pound, up 32 percent from last year. Similarly, USDA's Federal-State Market News Service reported f.o.b. prices for California fresh peaches at levels about \$1.00 per box above last year. Higher grower and wholesale prices have also resulted in higher retail prices for fresh peaches. Retail prices for fresh peaches, as reported by the Bureau of Labor Statistics, averaged 89.5 cents per pound in July, up 18 percent from a year ago. Prices are expected to remain strong for the remainder of the season.

With California clingstone peach production forecast only slightly up from last year, indications are that grower prices for canning peaches will be similar to the prices negotiated with canners last season. In August, the California Canning Peach Association reported that an agreement had been negotiated with canners for prices to be based on a sliding scale of \$214-\$224 per ton, depending on the total amount delivered and discounted for off-grade. The agreement between the Association and canners last season set the base price at

\$218 per ton for deliveries up to 8 percent off-grade. Heavy fresh market demand for California's freestone peach crop, as a result of shorter supplies on the East Coast, also boosted the prices paid to growers for processing freestones this year.

Sweet and Tart Cherry Crops Significantly Smaller

Sweet cherry production this year is forecast at 122,075 short tons, down 37 percent from 1989. Smaller crops are expected in each sweet cherry producing State except Montana, which had no commercial production last year. California and Washington production was severely reduced by the heavy rains over the Memorial Day weekend that caused fruit to split on trees, which rendered it unsuitable for fresh market sale. Prospects in Oregon were dashed by a lighter than expected fruit set early in the season.

Fewer sweet cherries had a significant impact on fresh market f.o.b. prices this

season. For example, f.o.b. prices for Washington bings in mid-July were ranging 50-80 percent higher than a year earlier. With July 31 cold storage holdings of frozen sweet cherries running 35 percent lower than a year ago, at 15.3 million pounds, prices are expected to remain relatively firm.

USDA's July 1 forecast for the 1990 tart cherry harvest placed production at 224.8 million pounds, down 18 percent from last season and 5 percent below 1988. The smaller crop this season is expected to help ease the heavy inventories of canned and frozen tart cherries carried over by processors during the past couple of seasons.

Good Supplies of Plums, Nectarines, and Apricots

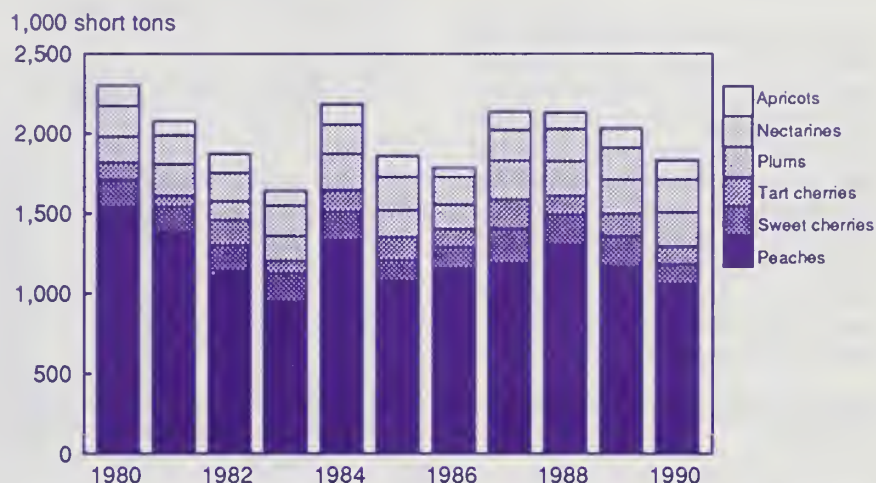
Harvest commenced on early plum, nectarine, and apricot varieties in May. In July, California plum production was forecast at 210,000 short tons, down 1 percent from last season. Although the plum harvest got off to a slow start and fruit size was variable, quality was

excellent. Good sizes and excellent quality also describe the 1990 California nectarine crop, which was forecast at 205,000 short tons on August 1, up 3 percent from the last 2 seasons. Total U.S. apricot production also is forecast up 4 percent from last season, at

122,200 short tons. The larger crop prospect is primarily the result of a bigger Washington apricot crop, which, at 7,000 short tons, will be more than 4 times the size of last year's freeze-damaged crop and 15 percent larger than 1988, if the forecast is realized.

Figure 11

U.S. Total Production of Stone Fruit



1989/90 Orange Crop Smallest in 5 Years

The production loss in Florida and Texas, as a result of late-December's freezing temperatures, more than offset record navel production and near-record valencia production in California.

Smallest U.S. Orange Crop In 5 Years

USDA's end-of-season estimate for the 1989/90 U.S. orange crop placed production at 7.81 million short tons (186.1 million boxes), down 13 percent from last season and the smallest crop in 5 years. The smaller crop is the result of late-December's freezing weather in Florida and Texas, which caused significant damage to fruit and also to trees in some areas. The loss in Florida and Texas more than offset California's record navel orange production.

Record Orange Juice Prices to Soften

Processing of Florida's freeze-damaged orange crop was virtually completed by the end of May. On September 1, the Florida Citrus Processors Association reported that only 90.3 million gallons of FCOJ (42 degrees Brix) was packed from domestic fresh fruit this season, down 48 percent from a year earlier. To supplement the smaller domestic pack, Florida processors imported 61.5 million gallons of FCOJ through the last week in August, 98 percent more than last season. Despite the large increase in imports, stocks on hand at Florida plants were 17 percent below a year ago.

Retail and institutional movement was sluggish through the summer, with wholesale and retail prices at record levels. However, movement is expected to increase in September as Brazilian exporters announced price cuts in August, which allowed Florida processors to ease the record-high list prices in effect since last winter.

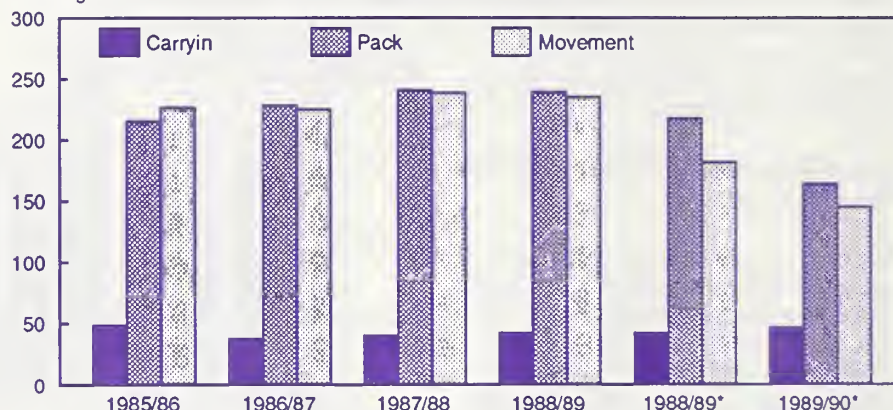
A Good Season for California Orange Growers

The end-of-season estimate for California's orange crop placed production at 2.74 million short tons (73.1 million boxes), up 24 percent from last

Figure 12

Florida Supply and Movement of Frozen Concentrated Orange Juice

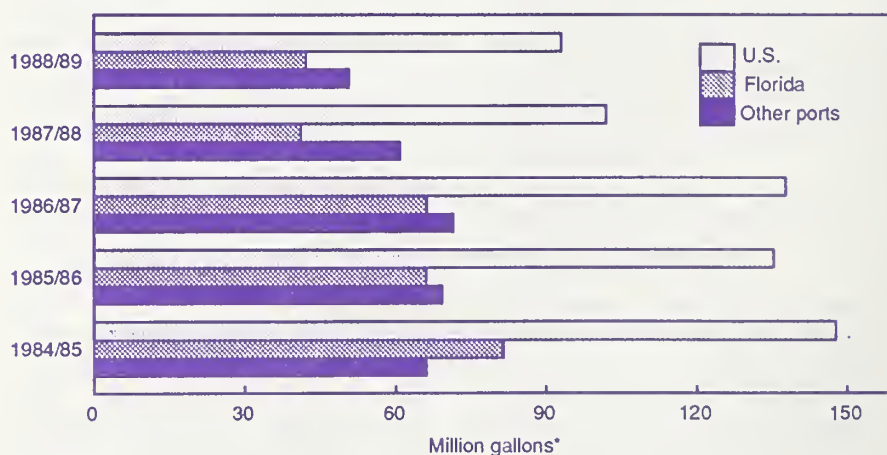
Million gallons



*Data for 1988/89 through September 2 and 1989/90, September 1.

Figure 13

U.S. Imports of FCOJ



*42 degree Brix.

season and only 4 percent below the State's record 1982/83 crop. Despite harvesting a record navel crop this season, California growers benefited from the strong prices generated by shorter Florida orange supplies, and from strong export demand. Moreover, although harvest of the California

valencia crop commenced before the navel harvest was completed, California grower prices for valencia oranges were relatively unaffected by the overlap because of the smaller Florida valencia crop and strong fresh and processing demand for valencias.

Early Prospects for 1990/91

Official USDA forecasts for the 1990/91 U.S. orange crop will not be available until October, except for the California navel orange forecast released in September. However, prospects are good for a partial recovery in Florida from this season's freeze. Fruit

sizes are reported much larger than normal for this stage in the growth cycle, and the crop continues to make good progress despite the drought conditions over much of the State this summer. Conversely, California's navel crop has been subject to extended periods of extremely high temperatures this summer, which could result in excessive

fruit drop and sunburn, and reduce prospects for next season. On September 1, the first forecast of the 1990/91 California early orange crop, including navels, placed production at 1.5 million short tons (40 million 75-pound boxes), down 9 percent from last season.

Grapefruit Production Set Back in 1989/90

Smaller Florida and Texas grapefruit crops in 1989/90 significantly reduced domestic fresh market availability, curtailed exports, lowered juice pack, and boosted prices for California and Arizona growers.

Smallest Crop In Over 20 Years

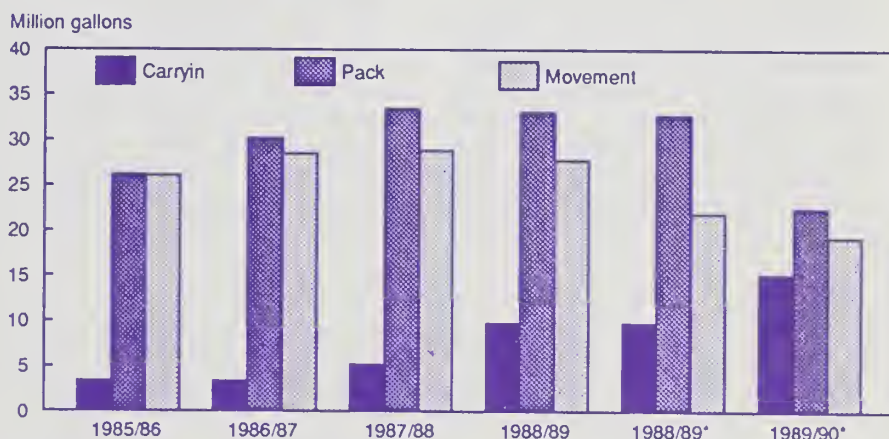
Reflecting the damage sustained by Florida and Texas grapefruit crops during late-December's freezing temperatures, the end-of-season estimate for the 1989/90 U.S. grapefruit crop placed production down 31 percent from last season. At 1.95 million short tons (48.6 million boxes), the crop is the smallest recorded in over 20 years. In Florida, the crop was pegged at 1.52 million short tons (35.7 million boxes), down 35 percent from 1988/89, while in Texas, production was estimated down 58 percent, at 80,000 short tons (2 million boxes). Conversely, production in California and Arizona was estimated up 8 and 11 percent, respectively, at 285,000 and 70,000 short tons (8.7 and 2.2 million boxes). Because of the significant production shortfall in Florida and Texas, the average grower price for California and Arizona grapefruit has been almost double a year earlier over the past six months, despite the larger crops in both States.

Smaller Florida and Texas Crops Curtail Juice Pack and Exports

Reflecting the smaller Florida grapefruit crop, the pack of frozen concentrated grapefruit juice (FCGJ) at Florida plants through September 1 was only 22.5 million gallons, down 31 percent from the same time last year. With wholesale and retail prices firm at levels about 25 percent above last year, retail and institutional FCGJ movement through the last week in August lagged a year ago by almost 12 percent. The

Figure 14

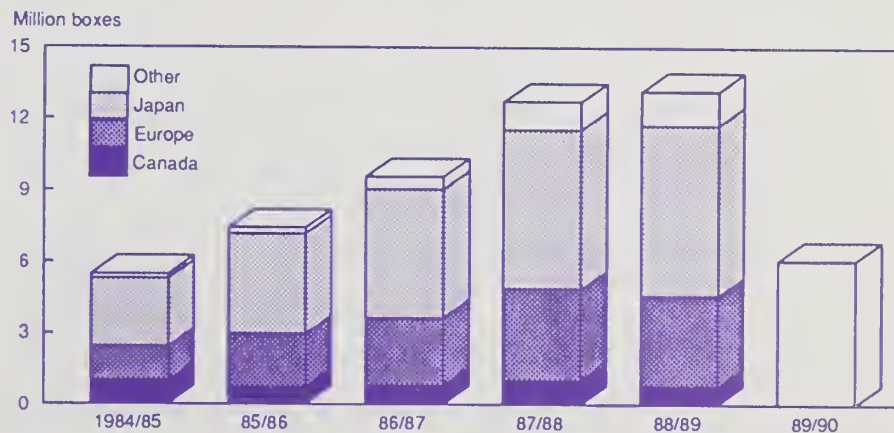
Florida Supply and Movement of Frozen Concentrated Grapefruit Juice



*Data for 1988/89 through September 2 and 1989/90, September 1.

Figure 15

U.S. Exports of Fresh Grapefruit



Season beginning September. 1989/90 total U.S. estimated.

smaller pack has offset sluggish movement, however, and stocks on hand at Florida plants on September 1 were down 11 percent from last year, at 18.4 million gallons.

The reduction in availability of fresh market quality grapefruit from Florida and Texas significantly curtailed U.S. fresh grapefruit exports during 1989/90. U.S. fresh grapefruit exports through June totaled only 267,953 metric tons, down 43 percent from a year ago. Exports to all major markets except Canada, were significantly lower.

However, the increase to Canada could be the result of better reporting procedures for tabulating U.S. agricultural exports to that country. U.S. fresh grapefruit exports are expected to resume in 1990/91 with recovery of the Florida crop, but Texas is not expected to export much until after 1991/92.

Early Prospects for 1990/91

Although USDA production forecasts for the 1990/91 grapefruit crop will not be available until October, crop conditions are favorable in Florida. Florida

growers harvested the first grapefruit of the season in mid-August, the earliest harvest date on record. In Texas, growers are not expected to harvest a commercial crop in 1990/91. At this time, prospects for the 1990/91 grapefruit crops in California and Arizona are more obscure. Harvest in the desert region will not begin until November, and in April for California's other areas.

Berry Supplies Ample

Larger strawberry, cranberry, and blueberry crops are expected in 1990, but prospects point toward smaller crops of most other bushberries.

California Strawberry Crop Record High

The August estimate for the 1990 U.S. strawberry crop placed production in the major producing States at 1.13 billion pounds, up 6 percent from last year, and only 4 percent below 1988's record harvest. While production is forecast up in each of the major producing States except Florida and Washington, the California crop is expected to reach a record 917 million pounds, 10 percent more than 1989 and up 7 percent from 1988's previous record. In Florida, the winter crop is forecast down 15 percent from last year, at 116.6 million pounds, after late-December's freezing temperatures damaged berries and set shipments back several weeks.

Because of the large California crop, and because freezing temperatures early this spring reduced fresh market quality of berries on plants, the trade reported deliveries to California freezers totaled a record 244.5 million pounds, up almost 50 percent from last year. Combined with deliveries to freezers in Washington and Oregon, the trade reports that 308.9 million pounds were delivered in the 3-State area through mid-August, up 34 percent from a year earlier. However, despite an increase in July 31 frozen strawberry supplies in cold storage, the trade reports that finished product inventories are largely committed and spot pricing is steady, although prices are about 10 percent lower than a year ago.

On the other hand, grower and f.o.b. prices for fresh strawberries have remained at levels well above last year through the spring and summer, despite the increase in domestic supplies. In August, grower prices for fresh strawberries averaged 50 cents per pound, up 24 percent from July and 43 percent above a year ago.

1990 Cranberry Crop Forecast Near-Record

In August, the 1990 cranberry crop was forecast at 3.98 million 100-pound barrels, up 6 percent from last year and only 3 percent below 1988's record harvest. The larger forecast is the result of prospects for increased production in New Jersey, Oregon, Washington, and Wisconsin that is expected to offset a smaller crop in Massachusetts, the largest cranberry producing State. Production in Massachusetts is forecast at 1.75 million barrels, down 4 percent from 1989, as cold weather last December, early flooding of bogs, and last year's large crop have stressed plants. The crop appears to be of average quality in most of the producing States except New Jersey, where favorable weather conditions resulted in an above-average fruit set and timely rains produced larger than normal berries.

Bushberry Supplies Ample In 1990

Although official USDA crop estimates for domestic blueberry and other bushberries (raspberries, blackberries, boysenberries, and loganberries) are not available, trade estimates indicate that ample supplies of most will be available in 1990. Trade forecasts in August placed the 1990 North American (including Canada) blueberry crop (commercial and wild) at around 233

million pounds, 8 percent higher than last season. In Michigan, the largest blueberry producing State, the crop is forecast at 59 million pounds, 2 percent less than the record harvest last season. Crop prospects were also dampened in New Jersey and North Carolina by adverse weather earlier this year, while Maine is expecting a large crop of wild blueberries.

Table 5--Strawberry deliveries for freezing, 1987-90

State	1987	1988	1989	1990
--Million pounds--				
California	218.0	173.8	165.5	1/ 244.5
Oregon	89.6	96.4	58.7	57.3
Washington	21.2	19.6	5.7	7.0
Total	328.8	289.8	229.9	308.8

1/ Through August 18.

Source: Food Institute Reports.

Table 6--Frozen berries: Cold storage holdings, July 31, 1988-90

Commodity	1988	1989	1990
--1,000 pounds--			
Blackberries	18,929	16,031	18,125
Blueberries	25,767	30,119	30,811
Boysenberries	6,224	5,465	8,144
Raspberries, red	47,981	54,081	37,920
Strawberries	355,539	257,909	310,637
Total	454,440	363,605	405,637

Source: National Agricultural Statistics Service, USDA.

Movement of frozen blueberries has been somewhat sluggish in 1990 except for Maine wild blueberries for which there is brisk European demand. Cold storage holdings of frozen blueberries were pegged at 30.8 million pounds on July 31, up 2 percent from a year ago. Exports between January and June totaled only 2,410 metric tons, down 51 percent from the same period last year. Smaller shipments were reported to most major export markets,

including Canada and the United Kingdom.

Deliveries of red and black raspberries, blackberries, boysenberries, and loganberries to Washington and Oregon freezers through mid-August totaled 59.1 million pounds, down 20 percent from a year earlier. The shortfall is primarily due to significantly smaller crops of all berries in Washington, where production was curtailed by

adverse weather conditions earlier this year. However, deliveries of red and black raspberries to Oregon freezers also lagged a year earlier. Despite indications for smaller packs of most bushberries this season, wholesale prices have remained relatively steady with significant quantities of frozen berries in cold storage.

Record Tree Nut Supplies Again in 1990/91

Marketable tree nut supplies in 1990/91 are expected to total about 1.5 billion pounds, up 11 percent from 1989/90's record. The increase is expected to put downward pressure on grower prices.

Record 1989/90 Supply Despite Smaller Crops

The U.S. marketable supply of all tree nuts (almonds, walnuts, pecans, pistachios, hazelnuts, and macadamias), including imported tree nuts, is estimated to have reached a record 1.34 billion pounds (shelled basis) during 1989/90, up 5 percent from the prior season. In spite of smaller production for most tree nut crops, large carryover stocks pushed total supply to a record level.

Almonds in 1989/90, at a record 722 million pounds, accounted for about one-half of total tree nut supplies, even though almond production fell sharply in 1989. Supplies of walnuts and macadamias were also higher in 1989/90, but pecans, hazelnuts, and pistachios were lower. U.S. tree nut imports also increased last year, with the exception of Brazil nuts, which decreased substantially.

Strong demand pushed total tree nut use during 1989/90 to 1.0 billion pounds (shelled basis), slightly higher than the previous season. Domestic use rose 3 percent to a record 587 million pounds, but exports decreased 2 percent to 442 million pounds (shelled basis). Per capita tree nut consumption, at 2.35 pounds, was a new record and compares with 2.31 pounds per capita in 1988/89.

1990/91 Tree Nut Supplies Burdensome

Total beginning stocks of all tree nuts for the 1990/91 season are above average. Although carryin stocks for the new marketing year are below normal for pecans, pistachios, and hazelnuts, these are more than offset by higher than normal stocks of almonds and walnuts. When the substantial production increases expected in 1990 for all tree nut crops, except walnuts and pecans, are added to the large total carryin

stocks, the resulting supplies of all tree nuts will be burdensome.

Large Almond Crop, Record Supply Forecast

The final forecast for 1990 California almond production is 655 million pounds, up 34 percent from the 1989 crop, and the second largest on record. The 1990 crop will be harvested from an estimated 407,000 bearing acres and should yield 1,609 pounds of kernels per acre compared with last year's yield of 1,200 pounds per acre. The California almond crop is in excellent condition despite the current drought, although nut sizes are slightly smaller than last year. No major insect or disease problems are reported.

Beginning stocks on July 1 for the 1990/91 season, were about 215 million pounds, 21 percent lower than a year earlier. Total supply will approximate 870 million pounds, but the almond industry proposes to place 35 percent of the 1990 production (220 million pounds) into a market reserve. This reserve, combined with losses and exempt shipments totaling 26 million pounds, will reduce the current season's marketable supply to about 625 million pounds. Salable supplies will be about 14 percent less than in the 1989/90 season. World supplies available for sale as of September 1 are estimated by the industry to be 849 million pounds, down 12 percent from a year ago. Smaller marketable supplies and good export potential should help to firm up almond prices during the current season. If demand dictates a larger supply is needed, some, or all, of the market reserve can be released to boost the salable quantity.

Due to continuing strong demand, and a shorter 1990 Spanish almond crop, U.S. domestic use and exports are likely to reach new record levels, with total shipments from handlers expected to reach

565 million pounds. Ending stocks (including the reserve) for the 1990/91 season might be slightly larger than 1989/90, but this should put the almond industry in a strong competitive position for the 1991/92 season since it is likely that production in 1991 will be lower due to the alternate year bearing characteristic of almonds.

Above-Normal Hazelnut Crop Estimated

The 1990 hazelnut (filbert) crop in Oregon and Washington is estimated at 21,000 tons (in-shell basis), 62 percent above last year's small crop and the third largest on record. Acreage is trending upward but the production increase stems mostly from much improved yields.

Pollination was much better than last year's freeze damaged crop. Good rainfall in May and early June caused good-to-excellent nut sizing and vigorous tree growth. Since early July, above average temperatures and limited precipitation have caused the crop to develop very rapidly. Harvest should be much earlier than normal.

With the larger supply this season, domestic use and exports should increase. Last season, a larger-than-normal quantity of hazelnuts was imported to offset the small U.S. supply.

Smaller Pecan Crop and Lower Stocks

The September 1 forecast for 1990 U.S. pecan production is 221 million pounds (in-shell basis), 12 percent below last year and 28 percent below the 1988 crop. The smaller crop, combined with the lowest beginning stocks since 1981/82, will result in relatively small supplies for the 1990/91 marketing season.

Freezing weather in April caught many pecan trees in bloom, causing a light set in Georgia and many other important pecan producing States. Hot, dry weather during the summer that caused heavy nut drop in Georgia, Arkansas, South Carolina, and Florida will also contribute to the projected smaller pecan crop in 1990.

Domestic consumption of pecans appears to have reached a plateau since the mid-1980's. In the past 5 years, total consumption has been fairly stable, while per capita consumption has fluctuated between .47 and .54 of a pound. Exports have grown modestly, while imports have varied depending on the availability of pecans from Mexico and the needs of U.S. shellers.

Record Pistachio Crop Forecast

The 1990 California pistachio crop was forecast on August 29 at a record 115 million pounds (in-shell basis). This is almost 3 times greater than the small crop harvested last year and 22 percent above the previous record 1988 crop.

The large increase is primarily due to the alternate year bearing characteristic of the pistachio tree. Bearing acreage also increased 6 percent from 1989 to 51,500 acres. This production increase stems from a larger number of clusters per tree but the number of nuts per cluster is down from last year. Quality is expected to be good. Harvest should be active by mid-September.

Although beginning stocks are relatively low, the record 1990 crop will push total supply well above the previous high level established in 1988/89. Grower prices in 1990/91 are likely to average lower than the \$1.56 per pound received last season.

Domestic consumption is expected to expand significantly due to strong growth in domestic demand. Exports are modestly trending up due to keen international competition, especially from Iran and Mediterranean countries.

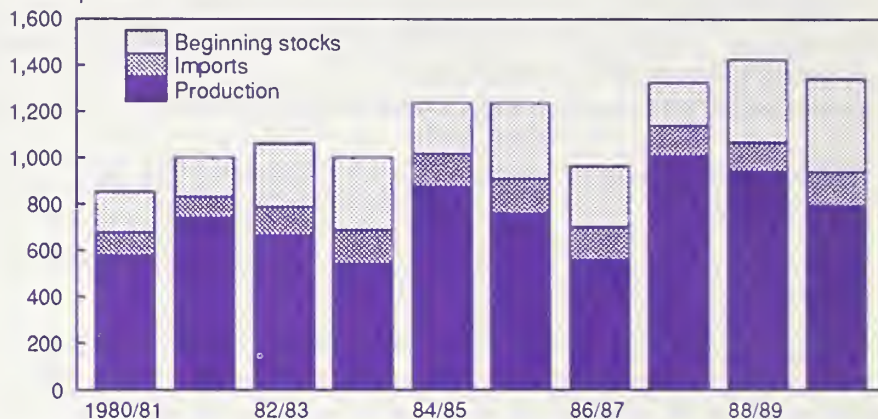
Steady Growth Continues for Macadamias

Although the yield per acre for the 1989 crop of Hawaiian macadamia nuts was somewhat disappointing due to weather

Figure 16

U.S. Tree Nut Supplies

Million pounds

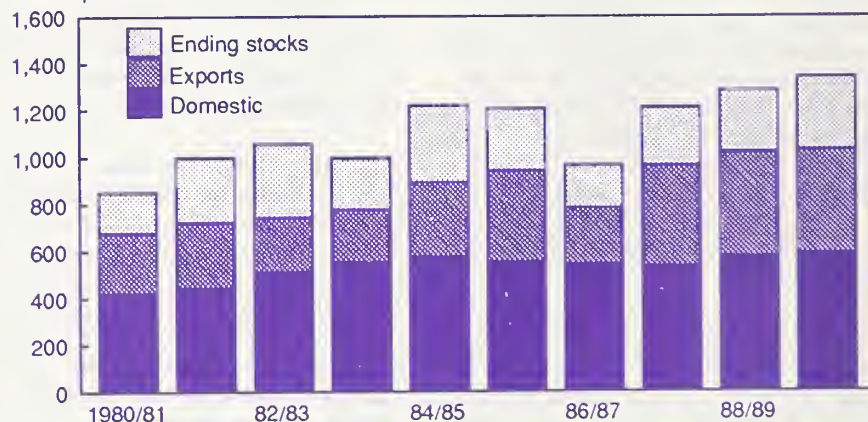


Shelled basis. Production excludes market reserve held out. 1989/90 estimated.

Figure 17

U.S. Tree Nut Utilization

Million pounds

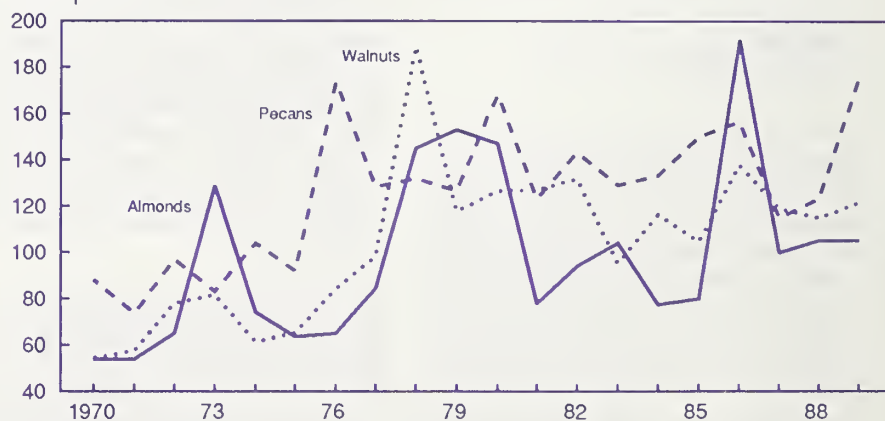


Shelled basis. 1989/90 estimated.

Figure 18

Grower Prices for Almonds, Pecans, and Walnuts

Cents/pound



Shelled basis.

related problems, production reached nearly 51 million pounds, 11 percent higher than the previous record crop in 1988. More bearing acreage and another year of maturity for the younger orchards are the principal reasons for the increased production. Although no official forecast is available for Hawaiian macadamias, production is expected to increase again, assuming no severe weather or other problems.

Large Walnut Crop and Supply Expected

The 1990 walnut production in California is forecast at 225,000 short tons (in-

shell basis). This level is 2 percent below last year, but 8 percent above the 1988 crop. Bearing acreage this year is estimated at 178,000 acres, up slightly from 1989. The yield per acre is forecast at 1.26 tons and compares with 1.29 tons harvested last year and a record yield of 1.40 in 1987.

This year's walnut crop is being affected by sunburn and drought. Nut set is above a year ago, but nut sizes are variable due to the mild spring and hot summer. Harvest is expected to begin in mid-September.

Although 1990 production is down slightly from a year ago, beginningstocks are up slightly, which will result in a total walnut supply for the 1990/91 marketing season nearly the same as 1989/90. Grower prices this season will depend heavily on export demand. Last season export shipments were a record, resulting in an increase in grower prices even though supply was very large and domestic market shipments decreased slightly from the previous high level set in 1988.

List of Tables

	Page
1. Economic indicators of the U.S. fruit and tree nut sectors	4
2. Apples: Regional production 1988, 1989, and indicated 1990	6
3. Apples for processing: Utilization by product, 1985-1990	7
4. Banana imports, United States, 1984-90	8
5. Strawberry deliveries for freezing, 1987-90	17
6. Frozen berries: Cold storage holdings, July 31, 1988-90	17
7. Apples, commercial crop: Total production and season-average price received by growers, 1988, 1989, and indicated 1990 production	23
8. Apple production by varieties and areas, United States, 1985-1989 and indicated 1990	24
9. Fresh and processed apples: Season-average price received by growers, by type of use, principal States, 1987-89	25
10. Grapes: Total production and season-average price received by growers in principal States, 1988, 1989, and indicated 1990 production	26
11. Pears: Total production and season-average price received by growers, by States and Pacific Coast, variety comparison, 1988, 1989, and indicated 1990 production	26
12. Peaches: Total production and season-average prices received by growers, 1988, 1989, and indicated 1990 production	27
13. Cherries, sweet: Total production and season-average price received by growers, 1988, 1989, and indicated 1990 production	27
14. Cherries, tart: Total production and season-average received by growers, 1988, 1989, and indicated 1990 production	28
15. Apricots and nectarines: Total production and season-average price received by growers, 1988, 1989, and indicated 1990 production	28
16. Plums and prunes: Production and season-average price received by growers in principal States, 1988, 1989, and indicated 1990 production	28
17. Strawberries: Acreage, yield per acre, and production for major States, 1988, 1989, and indicated 1990	29
18. Cranberries: Total production and season-average price received by growers, 1988, 1989, and indicated 1990 production	29
19. Frozen fruit: Packer's carryin, pack, imports, supplies, disappearance, and stocks of selected items, United States, 1987/88-1989/90	30
20. Frozen concentrated citrus juices: Cannery's packs, supplies, and movement, Florida, 1985/86-1989/90	31
21. Canned citrus juices: Cannery's packs, supplies, and movement, Florida, 1985/86-1989/90	31
22. Fresh fruit: Retail price, marketing spreads, and grower-packer return per pound, sold in the Northeast and North Central regions, indicated months, 1989 and 1990	32
23. U.S. Producer Price Indexes of selected dried and frozen juice items, by months, 1987-90	33
24. U.S. monthly average price indexes for fruits, selected months, 1989-90	34
25. Tree nuts: Production, 1988, 1989, and indicated 1990	35
26. Tree nuts: Supply and utilization, by commodity and marketing year, 1987/88-1989/90	35

Table 7--Apples, commercial crop 1/: Total production and season-average price received by growers, 1988, 1989, and indicated 1990 production

State and area	Production 2/			Price per pound	
	1988	1989	1990	1988	1989
	--Million pounds--			--Cents--	
Eastern States:					
Maine	94.0	69.0	81.0	19.7	21.1
New Hampshire	57.0	41.0	45.0	22.6	23.1
Vermont	45.0	45.0	45.0	18.4	19.2
Massachusetts	88.0	78.0	88.0	22.6	21.8
Rhode Island	6.0	5.5	5.5	24.6	24.4
Connecticut	41.0	36.0	39.0	24.4	24.6
New York	910.0	960.0	990.0	10.8	10.4
New Jersey	65.0	48.0	50.0	12.0	15.3
Pennsylvania	520.0	320.0	470.0	9.2	10.7
Delaware	19.0	15.0	19.5	12.2	11.3
Maryland	54.0	37.0	33.0	12.2	11.2
Virginia	425.0	325.0	210.0	11.1	10.2
West Virginia	215.0	115.0	130.0	13.0	8.7
North Carolina	350.0	220.0	230.0	8.0	8.8
South Carolina	38.0	35.0	30.0	12.1	12.0
Georgia	33.0	25.0	25.0	13.1	14.0
Total	2,960.0	2,374.5	2,491.0		
Central States:					
Ohio	95.0	125.0	120.0	17.7	17.9
Indiana	56.0	64.0	57.0	17.6	18.7
Illinois	85.0	91.0	65.0	16.3	13.0
Michigan	830.0	950.0	800.0	8.8	8.2
Wisconsin	45.0	65.0	52.0	21.2	15.6
Minnesota	14.0	31.0	22.0	30.2	27.8
Iowa	9.5	11.5	11.5	21.4	20.8
Missouri	56.0	55.0	46.0	17.2	13.6
Kansas	12.0	13.0	8.0	17.6	20.9
Kentucky	11.0	16.0	8.0	15.8	18.0
Tennessee	12.5	11.5	9.0	15.6	14.7
Arkansas	10.0	9.0	11.0	16.8	18.8
Total	1,236.0	1,442.0	1,209.5		
Western States:					
Idaho	135.0	158.0	165.0	14.0	7.9
Colorado	65.0	70.0	40.0	11.0	9.6
New Mexico	10.0	5.3	11.5	19.5	20.0
Utah	40.0	56.0	26.0	12.5	12.0
Washington	3,900.0	5,000.0	4,900.0	13.0	8.7
Oregon	155.0	160.0	170.0	11.9	5.0
California	630.0	675.0	650.0	18.7	15.0
Arizona 3/		24.8	40.0		9.3
Total	4,935.0	6,149.1	6,002.5		
United States	9,131.0	9,965.6	9,703.0	12.7	10.2

1/ In orchards of 100 or more bearing age trees.

2/ Includes unharvested production and harvested not sold (million pounds):
1988-49.6, 1989-45.4.

3/ Estimates began with 1989 crop.

Source: National Agricultural Statistics Service, USDA.

Table 8--Apple production by varieties and areas, United States, 1985-1989, and indicated 1990

Variety	Area	1985	1986	1987	1988	1989	Aug. est. 1990
1,000 pounds 1/							
Red delicious	East	15,725	12,800	15,700	16,100	10,500	11,800
	Central	8,575	4,734	8,720	5,590	7,280	4,800
	West	41,440	54,800	90,720	66,680	86,300	84,117
	Total	65,740	72,334	115,140	88,370	104,080	100,717
Golden delicious	East	10,135	9,650	8,770	9,350	5,700	7,000
	Central	4,700	3,200	4,450	3,420	3,870	3,000
	West	15,735	19,970	28,150	23,590	27,600	26,400
	Total	30,570	32,820	41,370	36,360	37,170	36,400
McIntosh	East	12,400	11,300	12,300	12,000	10,750	11,000
	Central	4,480	2,940	4,000	3,330	4,130	3,850
	Total	16,880	14,240	16,300	15,330	14,880	14,850
Granny Smith	West	3,750	5,860	10,550	12,010	15,200	15,500
Rome	East	8,575	7,900	8,030	8,200	6,870	7,200
	Central	2,285	1,700	2,260	2,120	2,240	2,100
	West	2,600	2,600	4,750	3,470	4,150	4,000
	Total	13,460	12,200	15,040	13,790	13,260	13,300
Jonathan	East	925	950	960	980	780	770
	Central	7,325	5,000	6,860	5,640	6,070	5,700
	West	1,800	1,550	1,750	1,700	1,740	1,700
	Total	10,050	7,500	9,570	8,320	8,590	8,170
York	East	8,300	8,500	6,800	7,000	5,650	5,500
Stayman	East	4,400	4,400	4,000	3,940	3,230	3,400
	Central	1,275	790	1,220	770	980	700
	Total	5,675	5,190	5,220	4,710	4,210	4,100
Cortland	East	2,625	2,400	2,120	1,980	1,770	1,860
	Central	970	560	900	570	420	360
	Total	3,595	2,960	3,020	2,550	2,190	2,220
R.I. Greening	East	3,015	2,300	2,180	1,860	2,530	1,960
	Central	465	300	550	390	490	360
	Total	3,480	2,600	2,730	2,250	3,020	2,320
Newton	West	3,750	3,400	4,250	3,930	4,350	4,300
Winesap	East	800	900	920	930	810	770
	Central	700	420	750	630	700	600
	West	1,775	1,850	2,400	1,960	2,120	2,000
	Total	3,275	3,170	4,070	3,520	3,630	3,370
Idared	East	1,650	1,500	1,680	1,710	1,700	1,800
	Central	1,940	1,250	1,760	1,640	2,160	2,060
	Total	3,590	2,750	3,440	3,350	3,860	3,860
Northern Spy	East	750	700	800	680	620	600
	Central	2,525	1,900	2,280	1,720	2,010	1,600
	Total	3,275	2,600	3,080	2,400	2,630	2,200
Gravenstein	West	2,200	1,750	2,550	1,850	2,140	2,200
Empire	East	N.A.	N.A.	N.A.	N.A.	1,300	1,950
	Central	N.A.	N.A.	N.A.	N.A.	450	400
	Total	N.A.	N.A.	N.A.	N.A.	1,750	2,350
Other	East	5,306	4,902	5,753	5,746	4,325	3,697
	Central	3,879	2,503	3,892	3,609	3,535	3,267
	West	1,665	1,840	2,989	2,310	2,806	2,700
	Total	10,850	9,245	12,634	11,665	10,666	9,664
Total U.S.		188,440	187,119	255,764	217,405	237,276	231,021

1/ 42 pounds units.

Source: Data compiled for the 1990 Apple Marketing Clinic, Chicago, Il., August 17-18, 1990, International Apple Institute, McLean, Va.

Table 9--Fresh and processed apples: Season-average price received by growers, by type of use, principal States, 1987-89

Use and State	1987	1988	1989
--Cents/pound--			
FRESH:			
California	23.3	32.0	26.2
Michigan	11.0	13.2	11.8
New York	13.7	15.3	14.8
Virginia	13.4	14.3	12.6
Washington	10.4	16.1	11.0
United States	12.7	17.4	13.4
PROCESSED:			
--Dollars/ton--			
Canning--			
California	123.00	156.00	150.00
Maryland	116.00	156.00	152.00
Michigan	133.00	164.00	148.00
New York	126.00	160.00	142.00
North Carolina	121.00	148.00	165.00
Pennsylvania	117.00	148.00	148.00
Virginia	135.00	175.00	180.00
Washington	73.80	110.00	105.00
West Virginia	125.00	164.00	136.00
Other states	92.60	142.00	132.00
United States	118.00	152.00	141.00
Juice and cider--			
California	72.00	117.00	142.00
Kentucky	84.00	140.00	160.00
Maryland	94.00	100.00	92.00
Massachusetts	160.00	170.00	166.00
Michigan	84.00	106.00	86.00
New Hampshire	150.00	150.00	160.00
New Jersey	84.00	100.00	2/
New York	90.00	98.00	90.00
North Carolina	72.00	94.00	92.00
Ohio	128.00	112.00	96.00
Oregon	30.00	76.00	45.00
Pennsylvania	78.00	98.00	100.00
Virginia	86.00	116.00	99.00
Washington	32.80	73.00	52.30
West Virginia	92.00	116.00	104.00
Other states	81.60	109.00	91.90
United States	57.80	95.70	79.50
Frozen--			
Maryland	128.00	140.00	182.00
Michigan	150.00	184.00	176.00
New York	128.00	164.00	164.00
Pennsylvania	132.00	164.00	172.00
Virginia	128.00	168.00	2/
West Virginia	126.00	134.00	182.00
Other states	88.00	123.00	127.00
United States	132.00	164.00	158.00
Dried--			
California	121.00	119.00	125.00
Other states	56.80	104.00	90.50
United States	67.70	106.00	96.80
Other 1/--			
Maryland	108.00	102.00	102.00
Michigan	82.00	116.00	114.00
New York	130.00	154.00	156.00
Pennsylvania	94.00	102.00	118.00
Virginia	74.00	88.00	2/
West Virginia	94.00	126.00	140.00
Other states	86.30	113.00	98.70
United States	99.90	131.00	134.00
--Cents/pound--			
All apples	8.6	12.7	10.2

1/ Includes vinegar, wine, fresh slices for pie making.

2/ Data not available due to disclosure of individual operations.

Source: National Agricultural Statistics Service, USDA.

Table 10--Grapes: Total production and season-average price received by growers in principal States, 1988, 1989, and indicated 1990 production

States	Production 1/			Price per ton	
	1988	1989	1990	1988	1989
	--1,000 short tons--			--Dollars--	
New York	157.0	152.0	145.0	230	254
Pennsylvania	63.0	60.0	53.0	214	274
Ohio	8.9	8.0	9.0	264	266
Michigan	53.0	43.0	58.0	256	265
Missouri	3.3	3.6	1.8	311	348
North Carolina	3.3	1.7	3.0	330	406
Georgia	2.5	2.8	3.0	911	781
South Carolina	0.5	0.3	0.4	394	810
Arkansas	7.0	6.5	6.3	300	319
Arizona	25.5	26.5	29.0	1,250	674
Washington	182.0	229.0	200.0	245	302
Oregon	7.8	7.5	10.0	610	740
Total 2/	513.8	540.9	518.5		
California:					
Wine	2,180.0	2,190.0	2,100.0	297	340
Table	770.0	630.0	610.0	363	449
Raisin 3/	2,570.0	2,570.0	2,250.0	205	248
All	5,520.0	5,390.0	4,960.0	263	309
United States	6,033.8	5,930.9	5,478.5	266	309

1/ Includes unharvested production and harvested not sold (tons): 1988-1,600; 1989-800.

2/ Some figures may not add due to rounding.

3/ Fresh basis.

Source: National Agricultural Statistics Service, USDA.

Table 11--Pears: Total production and season-average price received by growers, by States and Pacific Coast, variety comparison, 1988, 1989, and indicated 1990 production

State and area	Production 1/			Price per ton	
	1988	1989	1990	1988	1989
	--Short tons--			--Dollars/ton--	
Connecticut	1,650	1,400	1,300	520.00	520.00
New York	17,300	16,500	15,500	235.00	223.00
Pennsylvania	5,100	5,500	4,000	345.00	394.00
Michigan	6,000	8,000	5,000	241.00	256.00
Colorado	3,800	4,000	2,500	251.00	337.00
Utah	2,000	2,600	2,200	384.00	340.00
Washington	310,000	349,000	365,000	292.00	295.00
Oregon	213,000	215,000	215,000	285.00	245.00
California	302,000	315,000	328,000	247.00	271.00
United States	860,850	917,000	938,500	274.00	275.00
Pacific Coast:					
Washington:					
Bartlett	147,000	157,000	165,000	244.00	258.00
Other	163,000	192,000	200,000	335.00	327.00
Total	310,000	349,000	365,000	292.00	295.00
Oregon:					
Bartlett	68,000	67,000	75,000	253.00	263.00
Other	145,000	148,000	140,000	300.00	237.00
Total	213,000	215,000	215,000	285.00	245.00
California:					
Bartlett	291,000	298,000	310,000	238.00	265.00
Other	11,000	17,000	18,000	477.00	365.00
Total	302,000	315,000	328,000	247.00	271.00
3 States:					
Bartlett	506,000	522,000	550,000	242.00	263.00
Other	319,000	357,000	358,000	324.00	291.00
Total	825,000	879,000	908,000		

1/ Includes unharvested production and harvested not sold (tons): 1988-450; 1989-300.

Source: National Agricultural Statistics Service, USDA.

Table 12--Peaches: Total production and season-average prices received by growers, 1988, 1989 and indicated 1990 production

State	Production 1/			Price per pound	
	1988	1989	1990	1988	1989
	--Million pounds--			--Cents--	
Alabama	24.0	15.0	12.0	20.2	24.6
Arkansas	20.0	2.5	18.0	15.0	24.1
California:					
Clingstone 2/	1,017.0	992.0	1,000.0	10.4	10.6
Freestone	523.0	524.0	530.0	15.0	24.1
Colorado	16.0	3/	17.0	26.9	3/
Connecticut	3.0	3.3	2.7	55.0	50.0
Delaware	3.1	0.4	0.3	21.3	33.8
Georgia	140.0	125.0	130.0	20.1	20.2
Idaho	11.8	7.2	8.0	26.0	37.9
Illinois	20.0	13.0	0.5	24.0	27.0
Indiana	3.0	4.0	0.8	30.9	32.2
Kansas	4.5	2.5	0.1	37.0	27.0
Kentucky	6.0	2.0	3/	28.0	37.6
Louisiana	6.0	1.4	4.5	32.0	36.0
Maryland	12.8	7.6	2.2	18.9	28.0
Massachusetts	2.2	2.1	1.7	55.0	50.0
Michigan	45.0	55.0	45.0	17.8	19.1
Mississippi	4.0	1.0	3/	26.5	40.0
Missouri	11.0	4.5	1.5	22.5	27.0
New Jersey	85.0	70.0	45.0	24.4	34.6
New York	14.1	12.5	13.5	27.2	29.4
North Carolina	36.0	12.0	10.0	16.7	18.5
Ohio	6.0	8.0	5.0	31.0	34.0
Oklahoma	26.0	25.0	8.0	26.4	27.5
Oregon	14.0	14.0	15.0	28.1	24.7
Pennsylvania	80.0	65.0	70.0	19.6	25.8
South Carolina	340.0	270.0	90.0	18.5	20.0
Tennessee	11.0	1.3	1.5	29.7	36.9
Texas	18.0	14.0	24.0	35.7	40.0
Utah	12.5	11.0	7.5	19.0	21.5
Virginia	29.0	15.0	2.5	14.7	21.3
Washington	50.0	44.0	50.0	19.3	25.5
West Virginia	20.0	9.0	5.0	16.9	25.6
United States	2,614.0	2,333.3	2,121.3	15.6	16.3

1/ Includes unharvested production and harvested not sold (million pounds):

United States, excluding California clingstone, 1988-91.5, 1989-57.9

2/ California clingstone is over the scale tonnage and includes culls and cannery diversion (million pounds): 1988-74 and 1989-65.

3/ No significant commercial production due to frost.

Source: National Agricultural Statistics Service, USDA.

Table 13--Cherries, sweet: Total production and season-average price received by growers, 1988, 1989, and indicated 1990 production

States	Production 1/			Price per ton	
	1988	1989	1990	1988	1989
	--Short tons--			--Dollars--	
California	26,000	26,000	17,000	771	939
Idaho	2,300	2,700	2,100	935	761
Michigan	28,000	25,000	20,000	657	468
Montana	3,300	2/	275	548	2/
New York	1,400	1,350	1,100	820	783
Oregon	60,000	53,000	35,000	647	549
Pennsylvania	1,200	700	200	1,260	1,500
Utah	2,000	1,700	1,400	776	800
Washington	62,000	84,000	45,000	983	802
United States	186,200	194,450	122,075	788	712

1/ Includes unharvested production and harvested not sold (tons): 1988-1,690; 1989-2,520.

2/ No commercial production due to frost.

Source: National Agricultural Statistics Service, USDA.

Table 14--Cherries, tart: Total production and season-average price received by growers, 1988, 1989, and indicated 1990 production

States	Production 1/			Price per pound	
	1988	1989	1990	1988	1989
	--Million pounds--			--Dollars--	
Colorado	1.3	0.5	1.0	0.251	0.125
Michigan	180.0	190.0	175.0	.183	.129
New York	22.0	31.0	20.0	.225	.151
Oregon	4.0	15.0	8.0	.195	.150
Pennsylvania	9.0	6.0	3.0	.256	.180
Utah	11.0	24.0	14.0	.190	.121
Wisconsin	8.9	8.2	3.8	.113	.111
United States	236.2	274.7	224.8	.187	.132

1/ Includes unharvested production and harvested not sold (million pounds): 1988-2.7; 1989-31.1.

Source: National Agricultural Statistics Service, USDA.

Table 15--Apricots and nectarines: Total production and season-average price received by growers, 1988, 1989, and indicated 1990 production

Item and State	Production 1/			Price per ton	
	1988	1989	1990	1988	1989
	--1,000 short tons--			--Dollars--	
Apricots--					
California	95.0	115.0	115.0	340	324
Utah	0.5	0.4	0.2	380	470
Washington	6.1	1.6	7.0	682	1,400
United States	101.6	117.0	122.2	363	340
Nectarines--					
California	200	200	205	394	396

1/ Apricots-includes unharvested production and harvested not sold (tons): United States, 1988-8,100; 1989-4,050.

Source: National Agricultural Statistics Service, USDA.

Table 16--Plums and prunes: Production and season-average price received by growers in principal States, 1988, 1989 and indicated 1990 production

State and area	Production 1/			Price per ton	
	1988	1989	1990	1988	1989
	--Short tons--			--Dollars/ton--	
Prunes and plums:					
Michigan	11,000	13,000	6,000	198.00	175.00
Idaho	6,500	6,500	6,800	283.00	422.00
Washington	13,500	13,500	12,500	187.00	162.00
Oregon	21,000	11,000	20,000	140.00	179.00
Total 4 States	52,000	44,000	45,300	183.00	209.00
Dried prunes:					
California	151,000	226,000	2/ 150,000	782.00	775.00
Plums:					
California	216,000	213,000	210,000	475.00	445.00
United States (fresh basis)	737,600	1,011,800	705,300		

1/ Includes unharvested production and harvested not sold (tons): 1988-3,900; 1989-2,150.
2/ Dry-fresh ratio is 3 to 1.

Source: National Agricultural Statistics Service, USDA.

Table 17--Strawberries: Acreage, yield per acre, and production for major States, 1988, 1989, and indicated 1990 1/

Crop and State	Acreage			Yield per acre			Production		
	1988	1989	1990	1988	1989	1990	1988	1989	1990
	--Acres--			--Cwt--			--1,000 cwt--		
Early:									
Florida	5,000	5,300	5,300	250	260	220	1,250	1,378	1,166
Late:									
California	19,200	19,900	20,600	450	420	445	8,640	8,358	9,167
Michigan	2,300	2,200	2,200	55	53	65	127	117	143
New Jersey	700	600	500	46	30	42	32	18	21
Oregon	7,800	6,200	5,700	130	105	115	1,014	651	656
Washington 2/	2,400	1,900	1,700	92	60	65	221	114	111
Group total	32,400	30,800	30,700	305	301	329	10,034	9,258	10,098
Major State total	37,400	36,100	36,000	298	295	313	11,284	10,636	11,264

1/ Includes fresh market and processing.

2/ Excludes unharvested or not marketed because of economic conditions: 1989-4,000 cwt and 1990-8,000.

Source: National Agricultural Statistics Service, USDA.

Table 18--Cranberries: Total production and season-average price received by growers, 1988, 1989, and indicated 1990 production

States	Production			Price per barrel 1/	
	1988	1989	1990	1988	1989
	--1,000 barrels--			--Dollars--	
Massachusetts	1,861	1,815	1,750	46.30	44.00
New Jersey	370	292	325	45.10	41.00
Oregon	154	184	190	44.90	40.70
Washington	135	156	160	44.90	40.70
Wisconsin	1,560	1,300	1,550	45.20	41.40
United States	4,080	3,747	3,975	45.70	42.60

1/ Equivalent returns at first delivery point, screened basis of utilized production.

Source: National Agricultural Statistics Service, USDA.

Table 19--Frozen fruit: Packers' carryin, pack, imports, supplies, disappearance, and stocks of selected items, United States, 1987/88-1989/90

Item and season 1/	Carryin	Pack	Imports	Total supply	Disappearance to March 31	Stocks March 31	Total season disappearance
--Million pounds--							
Total:							
1987/88	259.0	728.1	72.7	1,059.8	662.6	397.2	764.7
1988/89	295.1	672.2	77.0	1,044.3	624.7	419.6	743.9
1989/90	300.4	629.4	102.3	1,032.1	642.6	389.5	537.4
Apples:							
1987/88	41.0	122.4	--	163.4	76.5	86.9	128.1
1988/89	35.3	117.1	--	152.4	71.4	81.0	119.6
1989/90	32.8	123.3	--	156.1	65.4	90.7	N.A.
Apricots:							
1987/88	1.2	22.2	--	23.4	18.4	5.0	20.0
1988/89	3.4	14.7	--	18.1	14.1	4.0	14.9
1989/90	3.2	17.6	--	20.8	15.2	5.6	17.3
Cherries, sweet:							
1987/88	6.4	21.3	--	27.7	18.2	9.5	20.9
1988/89	6.8	18.5	--	25.3	7.6	17.7	9.7
1989/90	15.6	14.0	--	29.6	12.9	16.7	16.7
Peaches:							
1987/88	12.0	105.8	--	117.8	61.6	56.2	79.1
1988/89	38.7	110.3	--	149.0	75.5	73.5	107.2
1989/90	41.8	99.2	--	141.0	77.6	63.5	100.2
Strawberries:							
1987/88	141.0	334.5	53.8	529.3	367.4	161.9	364.2
1988/89	165.1	274.6	61.6	501.3	346.8	154.5	350.1
1989/90	151.2	238.1	75.3	464.6	341.1	123.5	243.6
Blackberries:							
1987/88	10.0	21.0	--	31.0	15.0	16.0	20.8
1988/89	10.2	21.4	--	31.6	15.4	16.2	22.2
1989/90	9.4	13.8	--	23.2	11.9	11.3	15.0
Blueberries:							
1987/88	18.0	69.2	14.7	101.9	70.1	31.8	86.1
1988/89	15.8	82.4	9.8	108.0	62.7	45.3	83.4
1989/90	24.6	89.3	18.2	132.1	82.9	49.2	101.6
Boysenberries:							
1987/88	1.8	5.2	1.1	8.1	4.8	3.3	5.7
1988/89	2.4	6.7	0.8	9.9	7.2	2.7	7.6
1989/90	2.3	4.9	2.4	9.6	6.9	2.7	7.6
Raspberries:							
1987/88	27.6	26.5	3.1	57.2	30.6	26.6	39.8
1988/89	17.4	26.5	4.8	48.7	24.0	24.7	29.2
1989/90	19.5	29.2	6.4	55.1	28.7	26.4	35.4

N.A.= Not available.

1/ Season beginning May 1 for strawberries, June 1 for apricots and boysenberries, October 1 for apples, and July 1 for all other items.

Sources: (pack) American Frozen Food Institute, (stocks) National Agricultural Statistics Service, USDA, and (imports) Bureau of Census, U.S. Department of Commerce.

Table 20--Frozen concentrated citrus juices: Canners' packs, supplies, and movement, Florida, 1985/86-1989/90

Item and season	Carryin	Pack 1/		Supply		Movement		Stocks 2/
		To date 2/	Total season	To date 2/	Total season	To date 2/	Total season	
--1,000 gallons 3/--								
Oranges:								
1985/86	48,347	190,799	215,124	239,146	263,471	168,011	226,476	71,135
1986/87	36,995	202,908	228,028	239,903	265,023	165,361	225,076	74,542
1987/88	39,790	215,918	240,861	255,708	280,651	179,948	238,567	75,760
1988/89	42,084	217,571	239,105	259,655	281,189	181,313	234,883	78,342
1989/90	46,306	163,577		209,883		144,563		65,320
Grapefruit:								
1985/86	3,386	25,555	26,174	28,934	29,560	20,082	26,138	8,860
1986/87	3,422	30,000	30,244	33,422	33,666	22,241	28,453	11,180
1987/88	5,216	33,111	33,463	38,327	38,679	21,782	28,881	16,545
1988/89	9,798	32,772	33,122	42,570	42,920	21,869	27,768	20,701
1989/90	15,152	22,509		37,661		19,252		18,409
Tangerines:								
1985/86	594	947	1,029	1,541	1,623	1,076	1,344	465
1986/87	279	836	471	1,115	750	962	660	153
1987/88	90	831	1,242	921	1,332	807	1,007	114
1988/89	325	581	592	906	917	605	836	301
1989/90	81	604		685		423		262

1/Includes frozen concentrated tangerine juice reprocessing in FCOJ, domestic receipts, foreign imports, net loss or gain during reprocessing, Florida product received from non-members, product used in FCOJ. 2/ For 1989/90 season, week ending September 1; 1988/89, September 2; 1987/88, August 27; 1986/87, August 29; and 1985/86, August 30. These respective dates include data through the 39th week of each season. 3/ Oranges and tangerines-42 degree Brix, and grapefruit-40 degree Brix.

Source: Florida Citrus Processors Association.

Table 21--Canned citrus juices: Canners' packs, supplies, and movement, Florida, 1985/86-1989/90

Item and season	Carryin	Pack		Supply		Movement		Stocks 1/
		To date 1/	Total season	To date 1/	Total season	To date 1/	Total season	
--1,000 cases, 24 No. 2's--								
Oranges: 2/								
1985/86	889	7,051	7,596	7,736	8,485	6,947	7,499	993
1986/87	986	7,535	8,122	8,521	9,108	7,426	8,084	1,096
1987/88	1,024	6,623	7,256	7,647	8,280	6,845	7,425	803
1988/89	855	7,718	8,164	8,573	9,019	7,680	8,227	893
1989/90	792	6,202		6,994		6,387		607
Grapefruit: 3/								
1985/86	1,288	9,553	9,948	10,685	11,236	9,090	9,721	1,751
1986/87	1,515	8,636	8,982	10,151	10,497	8,292	9,027	1,858
1987/88	1,471	7,257	7,724	8,728	9,195	7,240	7,871	1,488
1988/89	1,323	7,465	7,956	8,788	9,279	7,348	7,885	1,440
1989/90	1,394	4,258		5,652		5,959		862
Blend:								
1985/86	136	545	577	666	713	542	587	140
1986/87	126	509	533	635	659	485	533	150
1987/88	126	449	449	575	575	425	458	151
1988/89	117	392	424	509	541	403	426	106
1989/90	116	279		395		325		70

1/ For 1989/90 season, week ending September 1, 1988/89, September 2; 1987/88, September 3, 1986/87, August 29, and 1985/86, August 30. These respective dates include data through the 48th week of each season.

2/ Includes reconstituted orange juice.

3/ Includes reconstituted grapefruit juice.

Source: Florida Citrus Processors Association.

Table 22--Fresh fruit: Retail price, marketing spreads, and grower-packer return per pound, sold in the Northeast and North Central regions, indicated months, 1989 and 1990

Region, commodity, and month	Retail price	Marketing margins		Grower-packer return 1/ (f.o.b. shipping point price)	
		Absolute	Percent of retail price	Absolute	Percent of retail price
	--Cents--		Percent	Cents	Percent
NORTHEAST:					
Apples, Washington Red Delicious:					
June 1989	81.3	61.5	76	19.8	24
June 1990	80.6	55.0	68	25.6	32
May 1990	71.0	45.4	64	25.6	36
Grapefruit, Florida:					
April 1989	40.6	28.4	70	12.2	30
April 1990	62.0	44.2	71	17.8	29
March 1990	54.7	38.4	70	16.3	30
Lemons, California:					
June 1989	99.1	61.0	62	38.1	38
June 1990	104.7	67.5	65	37.2	35
May 1990	109.0	71.9	66	37.1	34
Oranges, California Navel:					
May 1989	58.6	38.3	65	20.3	35
May 1990	63.3	43.9	69	19.4	31
April 1990	63.3	44.8	71	18.5	29
NORTH CENTRAL:					
Apples, Washington Red Delicious:					
June 1989	74.8	55.0	74	19.8	26
June 1990	77.2	51.6	67	25.6	33
May 1990	57.2	31.6	55	25.6	45
Grapefruit, Florida:					
April 1989	43.3	31.1	72	12.2	28
April 1990	72.8	55.0	76	17.8	24
March 1990	65.3	49.0	75	16.3	25
Lemons, California:					
June 1989	109.7	71.6	65	38.1	35
June 1990	115.0	77.8	68	37.2	32
May 1990	111.5	74.4	67	37.1	33
Oranges, California Navel:					
May 1989	55.8	35.5	64	20.3	36
May 1990	58.0	38.6	67	19.4	33
April 1990	56.5	38.0	67	18.5	33

1/ Adjusted to account for waste and spoilage incurred during marketing.

Sources: Bureau of Labor Statistics, Department of Labor and Commodity Economics Division, ERS, USDA.

Table 23--U.S. Producer Price Indexes of selected dried and frozen juice items, by months, 1987-90

Items and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
--1982=100--												
Dried fruit:												
Prunes--												
1987	101.5	101.5	101.9	101.9	101.9	101.9	105.5	105.5	105.5	106.5	109.6	109.6
1988	109.6	109.6	109.6	109.6	109.6	109.6	109.6	109.6	110.3	110.3	110.3	110.3
1989	111.3	111.3	112.6	114.9	114.0	114.0	114.0	114.5	114.5	115.8	119.5	119.5
1990	119.5	119.5	119.5	119.5	119.5	119.5	119.5	114.5	114.5	115.8	119.5	119.5
Raisins--												
1987	83.9	83.9	83.9	83.9	83.9	83.0	83.9	83.9	82.2	82.2	86.4	88.2
1988	85.8	85.8	85.8	N.A.	88.2	88.2	88.2	88.2	88.2	84.2	89.9	89.9
1989	89.9	89.9	89.9	N.A.	N.A.	90.8	90.8	91.7	89.7	90.9	93.5	93.4
1990	91.1	93.5	N.A.	93.5	91.6	N.A.	91.1	91.7	89.7	90.9	93.5	93.4
Frozen juice:												
Orange, conc.--												
1987	106.9	106.9	107.4	109.5	109.7	110.0	110.1	111.0	110.6	110.6	117.2	129.9
1988	132.1	140.5	142.4	141.0	142.0	144.0	118.8	142.0	141.7	140.7	140.8	139.1
1989	137.3	127.7	126.5	125.4	130.6	139.2	140.7	140.3	134.0	131.6	123.1	121.7
1990	137.6	162.4	162.9	159.9	159.7	159.7	160.4	140.3	134.0	131.6	123.1	121.7
Grapefruit, conc.--												
1987	154.8	148.4	151.2	151.7	158.8	156.5	159.1	153.4	156.5	153.1	155.0	158.1
1988	159.6	160.0	155.5	153.6	161.4	160.2	162.2	161.1	161.1	148.9	155.5	147.5
1989	146.3	140.4	139.6	144.0	144.0	141.4	137.6	142.5	140.1	141.2	146.0	146.7
1990	151.4	159.6	158.8	159.6	159.6	160.6	160.8	142.5	140.1	141.2	146.0	146.7

N.A.= Not available.

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Table 24--U.S. monthly average price indexes for fruits, selected months, 1989-90

Items	1989						1990						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
	-- 1982=100--												
Producer Price Index:													
Fresh fruits	114.1	107.3	107.7	113.3	110.8	107.4	103.1	112.0	112.5	112.6	105.4	114.7	132.2
Citrus fruits	149.9	149.9	149.9	144.9	141.4	131.2	133.5	144.1	152.5	143.4	141.1	160.1	163.5
Other fruits	101.2	92.3	92.6	101.9	99.7	98.9	92.1	100.4	98.1	101.5	92.6	98.4	120.9
Canned fruit and juices	123.4	123.3	123.2	122.8	122.6	123.4	123.9	126.6	127.5	127.6	127.7	127.6	127.3
Canned fruits	121.1	120.7	120.4	119.3	119.0	120.1	120.3	120.3	120.0	121.0	121.1	120.9	121.3
Canned fruit juices	126.6	126.8	126.8	127.0	126.9	127.4	128.2	133.0	133.9	134.1	134.4	134.3	133.7
Frozen fruits and juices	129.0	129.1	127.4	125.6	121.4	119.9	128.6	147.0	147.8	145.9	146.1	146.2	146.3
Frozen fruits	118.3	118.4	116.9	115.2	111.4	109.9	117.9	134.8	135.6	133.1	134.0	134.1	134.1
Frozen juices	130.2	130.3	128.6	126.7	122.5	120.9	129.7	148.4	149.2	147.3	147.4	147.6	147.9
Dried fruits	102.8	103.3	105.4	103.4	103.6	106.2	106.9	106.9	106.9	106.4	105.2	105.2	104.9
	-- 1982-84=100--												
Consumer Price Index:													
Fresh fruits	150.6	151.4	155.1	156.6	152.7	154.8	171.4	170.3	171.1	175.7	174.9	173.2	176.6
Processed fruits	126.0	126.9	127.8	127.1	126.3	125.2	125.1	129.4	136.7	138.1	139.2	140.1	140.1
Fruit juices and frozen fruits	127.2	128.1	129.2	128.4	127.5	126.3	125.9	134.4	140.4	142.3	143.8	144.8	144.5
Canned and dried fruits	120.0	120.7	120.6	120.7	120.0	119.6	120.6	121.2	121.2	121.0	120.9	121.4	122.4
	-- 1977=100--												
Index of all fruit prices received by growers 1/	182	184	199	208	209	182	166	172	179	196	204	191	205
1/ Index for fresh and processed.													

Sources: Bureau of Labor Statistics, U.S. Department of Labor and National Agricultural Statistics Service, USDA.

Table 25--Tree nuts: Production, 1988, 1989 and indicated 1990

Crop and State	1988	1989	1990
--1,000 lbs. (kernel weight)--			
Almonds: California	590,000	490,000	655,000
--Short tons (in-shell)--			
Walnuts, English: California	209,000	229,000	225,000
Hazelnuts: United States	16,500	13,000	21,000
--1,000 lbs. (in-shell)--			
Pecans: United States	308,200	250,500	221,000
Macadamia nuts: Hawaii	45,500	50,500	1/
Pistachios: California	94,000	39,000	115,000

1/ Available January 1991.

Source: National Agricultural Statistics Service, USDA.

Table 26--Tree nuts: Supply and utilization, by commodity and marketing year, 1987/88-1989/90

Commodity	Marketing year	Production	Imports	Beginning stocks	Market reserve	Shelled basis				Consumption		
						Total supply	Ending stocks	Total use	Exports	Total	Per capita	
--1,000 pounds--												Pounds
Almonds	1987/88	634,557	646	79,017	114,220	600,000	116,071	483,929	343,295	140,634	0.57	
	1988/89	564,500	483	227,874	141,134	651,723	126,087	525,636	363,973	161,663	0.65	
	1989/90	462,000	66	267,221	0	729,287	211,000	518,287	341,900	176,387	0.71	
Hazelnuts	1987/88	17,745	3,863	399	0	22,007	1,758	20,249	5,898	14,351	0.06	
	1988/89	13,134	8,165	1,758	0	23,057	1,686	21,371	3,778	17,593	0.07	
	1989/90	10,400	6,454	1,686	0	18,540	1,083	17,457	3,344	14,113	0.06	
Pecans	1987/88	121,194	12,966	63,423	0	197,583	62,520	135,063	3,935	131,128	0.53	
	1988/89	135,030	2,344	62,520	0	199,894	70,776	129,118	5,884	123,234	0.50	
	1989/90	101,989	8,631	70,776	0	181,396	44,896	136,500	9,034	127,466	0.51	
Walnuts	1987/88	204,258	470	28,343	0	233,071	59,951	173,120	59,219	113,901	0.46	
	1988/89	167,539	184	59,951	0	227,674	48,236	179,438	60,318	119,120	0.48	
	1989/90	183,200	118	48,235	0	231,553	50,080	181,474	64,034	117,440	0.47	
Macadamias	1987/88	12,810	2,351	N/A	0	15,161	N/A	15,161	632	14,529	0.06	
	1988/89	13,650	2,713	N/A	0	16,363	N/A	16,363	1,259	15,104	0.06	
	1989/90	15,150	4,298	N/A	0	19,448	N/A	19,448	3,000	16,448	0.07	
Pistachios	1987/88	14,595	2,166	15,005	0	31,766	5,487	26,279	3,469	22,810	0.09	
	1988/89	45,685	854	5,487	0	52,026	14,897	37,129	6,442	30,687	0.12	
	1989/90	18,211	1,800	14,897	0	34,908	5,000	29,908	2,800	27,108	0.11	
Other Nuts 2/	1987/88	0	110,239	N/A	0	110,239	N/A	110,239	12,694	97,545	0.40	
	1988/89	0	111,838	N/A	0	111,838	N/A	111,838	8,368	103,470	0.42	
	1989/90	0	125,578	N/A	0	125,578	N/A	125,578	17,405	108,173	0.43	
Total Nuts	1987/88	1,005,159	132,701	186,187	114,220	1,209,827	245,787	964,040	429,142	534,898	2.18	
	1988/89	939,538	126,581	357,590	141,134	1,282,575	261,682	1,020,893	450,022	570,871	2.31	
	1989/90	790,950	146,945	402,815	0	1,340,710	312,059	1,028,652	441,517	587,135	2.35	

N/A=Not available.

1/ Marketing season begins January 1 for macadamias, July 1 for almonds and pecans, August 1 for hazelnuts and walnuts, and September 1 for pistachios.

2/ Includes other tree nuts such as Brazil nuts, cashew nuts, pignolias (Chinese pine nuts), and others. Marketing season for these other nuts begins July 1.

Source: Commodity Economics Division, ERS, USDA.

United States
Department of Agriculture
1301 New York Avenue, N.W.
Washington, D.C. 20005-4788

FIRST-CLASS MAIL
POSTAGE & FEES PAID
U.S. Dept. of Agriculture
Permit No. G-145

OFFICIAL BUSINESS

Penalty for Private Use, \$300

Moving? To change your address, send this sheet with label intact, showing new address, to EMS Information, Rm. 228, 1301 New York Ave., N.W. Washington, DC 20005-4788.

What's Your Subscription Situation?

Your subscription to *Fruits and Tree Nuts* expires in the month and year shown on the top line of your mailing label. **The expiration date will appear in one of two formats:** FEB91 (for February 1991) or 910430 (for April 30, 1991). Disregard this notice if no renewal date appears. Renew today by calling, toll free, 1-800-999-6779, or return this form with your mailing label attached.

Fruits and Tree Nuts Situation and Outlook

Renewal

<input type="checkbox"/> Bill me.		<i>1 Year</i>	<i>2 Years</i>	<i>3 Years</i>
<input type="checkbox"/> Enclosed is \$_____.	Domestic	_____ \$12.00	_____ \$23.00	_____ \$33.00
	Foreign	_____ \$15.00	_____ \$28.75	_____ \$41.25

Mail to:

ERS-NASS
P.O. Box 1608
Rockville, MD 20849-1608

Use purchase orders, checks drawn on U.S. banks, cashier's checks, or international money orders.

Make payable to ERS-NASS.

ATTACH MAILING LABEL HERE

Credit Card Orders:

<input type="checkbox"/> MasterCard	<input type="checkbox"/> VISA	Total charges \$_____.
-------------------------------------	-------------------------------	------------------------

Credit card number:

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

Credit card
expiration date:

<input type="text"/>	<input type="text"/>
Month/Year	

For fastest service, call toll free, 1-800-999-6779 (8:30-5:00 ET)